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Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Minimum DB seq length: 0
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A_Geneseq_19Jun03:*

1: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1980.DAT:*

2: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1981.DAT:*

2: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1982.DAT:*

3: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1982.DAT:*

4: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1984.DAT:*

5: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1984.DAT:*

6: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1985.DAT:*

7: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1987.DAT:*

8: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1989.DAT:*

9: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1989.DAT:*

10: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1990.DAT:*

11: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1990.DAT:*

12: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1990.DAT:*

13: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1990.DAT:*

14: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1990.DAT:*

15: /SIDS1/gcgdata/geneseq/geneseqp-embl/AA1990.DAT:*
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191.795 Million cell updates/sec
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| SIDSI/gcgdata/geneseq/geneseqp-embl/AA198.DAT:
| SIDSI/gcgdata/geneseq/geneseqp-embl/AA198.DAT:
| SIDSI/gcgdata/geneseq/geneseqp-embl/AA198.DAT:
| SIDSI/gcgdata/geneseq/geneseqp-embl/AA199.DAT:
| SIDSI/gcgdata/geneseq/geneseqp-embl/AA2000.DAT:
| SIDSI/gcgdata/geneseq/geneseqp-embl/AA2002.DAT:
| SIDSI/gcgdata/geneseq/geneseqp-embl/AA2002.DAT:
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Copyright (c) 1993 - 2003 Compugen Ltd
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

9	8	7	6	տ	4	w	N	_	Result No.	
95	95	110	112	169	170	315	316	316	Score	
30.1	30.1	34.8	35.4	53.5	53.8	99.7	100.0	100.0	Query	ьф
51	51	62	21	70	59	58	58	58	Query Match Length DB	
22	21	21	24	24	24	24	24	24	DB.	
AAM23999	AAY94528	AAY94527	ABG75795	ABG75793	ABG75796	ABG75792	ABG75794	ABG75791	ID	
Human EST encoded	Human basic histid	Human statherin pr	Bovine histatin li	Description						

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10
58	٠	58.5	59	60	60		60.5	61	61.5	۲	61.5	62	62	62	63	63	63	63	63	63	63	63	63	64	64	66	67.5	68	73	75	96	94.5	94.5		95
18.4	œ	18.5	æ	9		9	9		•	19.5	•		•	19.6	•	19.9		•	•		•		•			•	•	•	•	•		•	29.9	29.9	
46	2153	726	594	225	225	504	109	96	1390	729	294	1331	66	54	762	182	182	182	141	140	101	98	98	2016	5 4	1555	239	104	82	192	62	78	78	78	51
22	22	22	22	19	14	22	21	22	23	23	22	22	22	23	23	17	16	14	21	21	19	21	21	22	20	22	22	21	21	22	23	24	24	24	23
AAM91342	AAU33195	ABB70806	9	AAW53664	AAR33451	ABB60608	AAG47463	AAU51548	ABU65152	AAU11298	ABB68824	AAM39048	ABB67883	ABP32193	ABP29047	AAR92150	AAR72696	AAR39351	AAG14778	AAG47889	AAW72387	AAG47890	AAG14779		AAY06577	ABB58847	ABB70310	AAG47908	AAB42456	ABB69931	ABP64966	ABP76149	ABP75984	U	AAU90983
Human immune/haema	-		Ф	Human beta-casein.	Sequence encoded b	Drosophila melanog	Arabidopsis thalia	Propionibacterium .	Human NOV79a prote	Ashbya gossypii AG	Drosophila melanog	Human polypeptide			Streptococcus poly	Human milk kappa-c	Human kappa-casein	Recombinant human	Arabidopsis thalia		Pathogen response	Arabidopsis thalia	Arabidopsis thalia	3	m		7	m		phila mel	eir		GENSET prot	erin.	Transplant media a

ALIGNMENTS

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(GENE-) GENESIS RES & DEV CORP LTD. Glenn M, Grigor MR, Molenaar AJ, Davis SR;		27-007-2000; 200008-0699146.		•	23-AUG-1999; 99US-150330P.		19-FEB-2002; 2002US-0079754.		07-NOV-2002.		US2002164625-A1.		Bos taurus.		fungicide; antibacterial.		microbial infection; fungal infection; dental caries; plaque; tartar;	non-immune defence system; oral candidosis; gene therapy;	Cow; histatin; bovine; salivary secretion; oral cavity;		Bovine histatin like polypeptide, #1.		01-MAY-2003 (first entry)		ABG75791;		ID ABG75791 standard; Protein; 58 AA.	RESULT 1

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Best Local :
                   23-AUG-1999;
29-OCT-1999;
22-AUG-2000;
27-OCT-2000;
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N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       histatin polynucleotide is also useful in genome mapping, physical mapping or in the positional cloning of genes. Specifically, the polypeptide or polynucleotide is useful for treating fungal or bacterial infections of the oral cavity (e.g. dental caries, plaque or tartar), vagina, urethra, ear, skin, respiratory tract (e.g. cystic fibrosis caused by Pseudomonas aeruginosa), mucosa or eye, as well as for treating systemic infections such as systemic Candida infection. The polypeptide or polynucleotide is also useful for veterinary applications e.g. for treating mastitis. The sequence presented is a bovine histatin like
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           histidine rich and specific to the salivary secretions. They are believe to function as part of the non-immune defence system, particularly in the oral cavity and have promise as therapeutic agents in humans with oral candidosis. Also disclosed are compositions comprising the histatin polypeptide or polynucleotide, and at least one component consisting of physiological or pharmaceutical carriers or immunostimulants. The histatin polynucleotide, polypeptide, or the cosmetic composition comprising the polypeptide, is useful for treating (e.g. gene therapy) a disorder in a mammal, particularly microbial or fungal infections. The
                                                                                                                                                                                                                                                          non-immune defence system; oral candidosis; gene therapy; microbial infection; fungal infection; dental caries; plaque; tartar; cystic fibrosis; systemic infection; Candida infection; mastitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New histatin polynucleotides and polypeptides expressed in bovine tissues, useful for treating bacterial or fungal infections in mammals, e.g. infections of the oral cavity, vagina, urethra, ear or skin, or
                                                                                                                                                                                                                                                                                                                                               Bovine histatin
                                                                                                                                                                                                                                                                                                                                                                                01-MAY-2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                    ABG75794 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    The invention discloses isolated histatin polynucleotides polypeptides, which comprise sequences expressed in boving
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Claim
                                                                                                      19-FEB-2002;
                                                                                                                                        07-NOV-2002
                                                                                                                                                                          US2002164625-A1
                                                                                                                                                                                                                                                                                                           Cow; histatin; bovine; salivary secretion; oral cavity;
                                                                                                                                                                                                                                                                                                                                                                                                                    ABG75794;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
                                                                                                                                                                                                                                           fungicide;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       6; Page 13; 17pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         58;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MKIFIFVFIMALILAMIRADSSEEKRHRKRKKHHRGYFQQYQPYQRYPLNYPPAYPFP 58
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                                                                                                                                                                                                                                             antibacterial.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            58 AA;
                   99US-150330P.
99US-162701P.
2000US-0644190.
2000US-0699146.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                      2002US-0079754.
                                                                                                                                                                                                                                                                                                                                                                                (first entry)
                                                                                                                                                                                                                                                                                                                                               like
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                                                                                                                                                                                                                                                                                                                                               polypeptide, #4.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 316; DB 24;
Pred. No. 2.6e-32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
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The invention discloses isolated histatin polynucleotides and collections, which comprise sequences expressed in bovine. Histatins are histatine rich and specific to the salivary secretions. They are believed to function as part of the non-immune defence system, particularly in the candidosis. Also disclosed are compositions comprising the histatin of conjunction as part of the non-immune defence system, particularly in the candidosis. Also disclosed are compositions comprising the histatin of complypeptide or polynucleotide, and at least one component consisting of comprising the polynucleotide, and at least one components. The comprising the polynucleotide, is useful for treating (e.g. gene therapy) a comprising the polypeptide, is useful for treating (e.g. gene therapy) a comprising the polypeptide, is useful for treating (e.g. gene therapy) a comprising or in the positional cloning of genes. Specifically, the polypeptide or polynucleotide is also useful for treating fungal or bacterial compositions of the oral cavity (e.g. dental caries, plaque or tartar), coused by Pseudomonas aeruginosa), mucosa or eye, as well as for treating coused by Pseudomonas aeruginosa), mucosa or eye, as well as for treating consolutions in also useful for veterinary applications e.g. for collections mastitis. The sequence presented is a bovine histatin like
                                           Sequence
                                                                                     polypeptide.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      New histatin polynucleotides and polypeptides expressed in bovine tissues, useful for treating bacterial or fungal infections in mammals,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N-PSDB;
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Length
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Best Local
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                                                                                                                                    Cow; histatin; bovine; salivary secretion; oral cavity; non-immune defence system; oral candidosis; gene therapy; microbial infection; fungal infection; dental caries; plaque; cystic fibrosis; systemic infection; Candida infection; mastit
                                 19-FEB-2002; 2002US-0079754
                                                                              US2002164625-A1
                                                                                                                                                                                            Bovine histatin like polypeptide,
                                                                                                                                                                                                                    01-MAY-2003
                                                                                                                                                                                                                                                                ABG75792
                                                                                                                         fungicide; antibacterial.
                                                                                                     taurus
                                                                                                                                                                                                                                                                                                                                                                    58;
                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                   MKIFIFVFIMALILAMIRADSSEEKRHRKXKKHHRGYFQQYQPYQRYPLNYPPAYPFF 58
                                                                                                                                                                                                                                                                standard; Protein;
                                                                                                                                                                                                                                                                                                                        MKIFIFVFIMALILAMIRADSSEEKRHRKRKKHHRGYFQQYQFYQRYPLNYPPAYPFP
                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                   (first
                                                                                                                                                                                                                   entry)
                                                                                                                                                                                                                                                                                                                                                                 100.0%; Score 316; DB 24; 100.0%; Pred. No. 2.6e-32; tive 0; Mismatches 0;
                                                                                                                                                                                                                                                                 58
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23-AUG-1999; 29-OCT-1999;

99US-150330P 99US-162701P

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RESULT 4
ARG75776
ARG75777
XX
AC ARG77
XX
DT 01-M
XX
COW,
KW COW,
KW CON-KW micr
KW cyst
KW cyst
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KW cyst
KW cyst
XX
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DS DO 07-N
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     histidine rich and specific to the salivary secretions. They are believed to function as part of the non-immune defence system, particularly in the oral cavity and have promise as therapeutic agents in humans with oral candidosis. Also disclosed are compositions comprising the histatin polypeptide or polymucleotide, and at least one component consisting of physiological or pharmaceutical carriers or immunostimulants. The histatin polymucleotide, polypeptide, or the cosmetic composition comprising the polypeptide, is useful for treating (e.g. gene therapy) a disorder in a mammal, particularly microbial or fungal infections. The histatic polyment of the polyment o
                                                                                                                                                                                                                                                     non-immune defence system; oral candidosis; gene therapy; microbial infection; fungal infection; dental caries; plaque; tar cystic fibrosis; systemic infection; Candida infection; mastitis;
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     19-FEB-2002; 2002US-0079754.
                                                              07-NOV-2002
                                                                                                                   US2002164625-A1
                                                                                                                                                                                                                                fungicide;
                                                                                                                                                                                                                                                                                                                                                Cow; histatin;
                                                                                                                                                                                                                                                                                                                                                                                               Bovine histatin like polypeptide, #6.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ABG75796 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         polypeptides,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Claim 6; Page 13; 17pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New histatin polynucleotides and polypeptides expressed in bovine tissues, useful for treating bacterial or fungal infections in man
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Glenn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              22-AUG-2000;
27-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                invention discloses isolated histatin polynucleotides and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ies, useful for treating bacterial or fungal infections in mamma infections of the oral cavity, vagina, urethra, ear or skin, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   57;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MKIFIFIFIMALILAMIRADSSEEKRHRKRKKHHRGYFQQYQPYQRYPLNYPPAYPFP 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENESIS RES & DEV CORP LTD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ABX11389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MKIFIFVFIMALILAMIRADSSEEKRHRKRKKHHRGYFQQYQPYQRYPLMYPPAYPFP 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Grigor MR,
                                                                                                                                                                                                                                antibacterial.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   58 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2000US-0644190.
2000US-0699146.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      which comprise sequences expressed in bovine. Histatins are
                                                                                                                                                                                                                                                                                                                                             bovine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99.7%;
98.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Molenaar AJ,
                                                                                                                                                                                                                                                                                                                                             salivary secretion; oral cavity;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 315; DB 24;
Pred. No. 3.5e-32;
1; Mismatches · 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Davis SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        58;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
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RESULT 5
AB675793
IID AB67777
XX
AC AB67
XX
AC AB67
XX
DE Bovi
XX
DE Bovi
XX
Cow;
KW Cow;
KW Cow;
KW cyst
KW cyst
KW cyst
KW fung
XX
SOS Bos
XX
PN US20
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                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The invention discloses isolated histatin polynucleotides and polypeptides, which comprise sequences expressed in bovine. Histatins are consistidine rich and specific to the salivary secretions. They are believed to function as part of the non-immune defence system, particularly in the crandidosis. Also disclosed are compositions comprising the histatin candidosis. Also disclosed are compositions comprising the histatin polypuptide or polynucleotide, and at least one composition consisting of comprising the polypuptide, is useful for treating (e.g. gene therapy) a discrete in a mammal, particularly microbial or fungal infections. The comprising the polypuptide, is useful for treating (e.g. gene therapy) a constatin polynucleotide is also useful in genome mapping, physical companing or in the positional cloning of genes. Specifically, the colypeptide or polynucleotide is also useful for treating fungal or bacterial confections of the oral cavity (e.g. dental caries, plaque or tartar), caused by Pseudomonas aeruginoses) mucosa or eye, as well as for treating caused by Pseudomonas aeruginoses), mucosa or eye, as well as for treating corpolynucleotide is also useful for veterinary applications e.g. for treating mastitis. The sequence presented is a bovine histatin like conceptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      23-AUG-1999;
29-OCT-1999;
22-AUG-2000;
27-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New histatin polynuclectides and polypeptides expressed in bovine tissues, useful for treating bacterial or fungal infections in man e.g. infections of the oral cavity, vagina, urethra, ear or skin,
                                                                                                                                                                                  Bovine histatin
                                                                                                                                                                                                                   01-MAY-2003
                                                                                                                                                                                                                                                                                   ABG75793 standard; Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 6; Page 14; 17pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   systemic infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    WPI; 2003-275306/27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (GENE-)
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3
                                                                                                                                                                                                                                                                                                                                                                                                                                        34;
                                                                                                                                                                                                                                                                                                                                                                                                     1 MKIFIFVFIMALILAMIRADSSEEKRHRKRKKHH 34
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENESIS RES & DEV CORP
                                                                                                                                                                                                                                                                                                                                                                    MKIFIFVFIMALILAMIRADSSEEKRHRKRKKHH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Grigor MR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       59 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99US-150330P.
99US-162701P.
2000US-0644190.
2000US-0699146.
                                                                                                                                                                                                                 (first entry)
                                                                                                                                                                                like polypeptide,
                                                                                                                                                                                                                                                                                                                                                                                                                                                      53.8%; Score 170; DB 24; 100.0%; Pred. No. 5.8e-14;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Molenaar AJ,
                                                                                                                                                                                                                                                                                     70
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Davis SR;
                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 59;
                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  mammals,
                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    õ
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non-immune defence system; oral candi microbial infection; fungal infection cystic fibrosis; systemic infection;

oral candidosis; gene therapy; infection; dental caries; plaque; tar nfection; Candida infection; mastitis;

tartar;

fungicide;

Cow; histatin; bovine; salivary secretion; oral cavity;

US2002164625-A1

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RRESULT 6
RAG7572 1D
ABG757 2X
XX
ABG77 01-M
DT 01-M
DT 01-M
XX
XX
DE Bovi
XX
XX
XX
COW
XW
NON
XW
Micz
XW
CYST
XW
CYST
XX
XX
SOS
BOS
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                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           candidosis. Also disclosed are compositions comprising the histatin polypeptide or polynucleotide, and at least one component consisting of physiological or pharmaceutical carriers or immunostimulants. The comprising the polypeptide, is useful for treating (e.g. gene therapy) a comprising the polypeptide, is useful for treating (e.g. gene therapy) a comprising the polypeptide is also useful in genome mapping, physical platatin polynucleotide is also useful in genome mapping, physical mapping or in the positional cloning of genes. Specifically, the polypeptide or polynucleotide is useful for treating fungal or bacterial infections of the oral cavity (e.g. dental carries, plaque or tartar), consists, urethra, ear, skin, respiratory tract (e.g. cystic fibrosis caused by Pseudomonas aeruginosa), mucosa or eye, as well as for treating systemic infections such as systemic Candida infection. The polypeptide or polynucleotide is also useful for veterinary applications e.g. for treating mastitis. The sequence presented is a bovine histatin like
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
                                                    Cow; histatin; bovine; salivary secretion; oral cavity; non-immune defence system; oral candidosis; gene therapy; microbial infection; fungal infection; dental caries; plaque; cystic fibrosis; systemic infection; Candida infection; mastit
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       polypeptides, which comprise sequences expressed in bovine. Histatins are histidine rich and specific to the salivary secretions. They are believed to function as part of the non-immune defence system, particularly in the oral cavity and have promise as therapeutic agents in humans with oral
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       New histatin polynucleotides and polypeptides expressed in bovine tissues, useful for treating bacterial or fungal infections in mammals, e.g. infections of the oral cavity, vagina, urethra, ear or skin, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Glenn
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27-OCT-2000;
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29-OCT-1999;
                                                                                                                                             Bovine histatin like polypeptide,
                                                                                                                                                                                    01-MAY-2003
                                                                                                                                                                                                                                                          ABG75795 standard; Protein; 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim
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                                                                                                                                                                                                                                                                                                                                                                                                                                       Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             invention discloses isolated histatin polynucleotides and ypeptides, which comprise sequences expressed in bovine. H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2003-275306/27
)B; ABX11390.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6; Page 13-14; 17pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                        33;
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                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                                                                   MKIFIFIFIMALILAMIRADSSEEKRHRKRKKHH
                                                                                                                                                                                                                                                                                                                                                                                   MKIFIFVFIMALILAMIRADSSEEKRHRKRKKHH.34
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              70
                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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2000US-0699146.
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                                                                                                                                                                                 (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A,
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99US-162701P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                       53.5%;
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                                                                                                                                                                                                                                                                                                                                                                                                                      Score 169; DB 24;
Pred. No. 9.4e-14;
1; Mismatches 0
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                                                                                                                                               #5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          24;
                                                                                                                                                                                                                                                                                                                                                   34
                                                                                                                                                                                                                                                                                                                                                                                                                        0
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                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                        mastitis;
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AAY94527
ID AAY9
XX AAC AAY9
XX DF Hum
XX Lys
KW Lys
KW Bre
KW Astt
KW Can

statherin

06-OCT-2000 AAY94527;

(first entry)

Lysine-rich statherin protein; LRSP; acidic phosphoprotein; huma precipitation inhibitor; autoimmune; inflammatory disorder; AIDS asthma; allergy; diabetes mellitus; fungal; bacterial infection;

adenocarcinoma; melanoma

RESULT 7

AAY94527 standard; protein; 62

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                                                                                                                                                                            The invention discloses isolated histatin polynucleotides and comprises sequences expressed in bovine. Histatins are polypeptides, which comprise sequences expressed in bovine. Histatins are comprised in the comprise of the continuous defence system, particularly in the coral cavity and have promise as therapeutic agents in humans with oral cavity and have promise as therapeutic agents in humans with oral cavity and have promise as therapeutic agents in humans with oral conditions is. Also disclosed are compositions comprising the histatin of polypeptide are compositions comprising the histatin of polypucleotide, polypeptide, or the cosmetic composition comprising the polypeptide, is useful for treating (e.g. gene therapy) a discorder in a mammal particularly microbial or fungal infections. The chistatin polynucleotide is also useful in genome mapping, physical conspiration or in the positional cloming of genes. Specifically, the polypeptide or polynucleotide is useful for treating fungal or bacterial conjugations of the oral cavity (e.g. dental caries, plaque or tartar), consistency vagina, urethra, ear, skin, respiratory tract (e.g. cystic fibrosis caused by Pseudomonas aeruginosa), mucosa or eye, as well as for treating corpolynucleotide is also useful for veterinary applications e.g. for treating mastitis. The sequence presented is a bovine histatin like
                                                                  Matches
                                                                               Best Local
                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  29-OCT-1999;
22-AUG-2000;
27-OCT-2000;
                                                                                                                                Sequence
                                                                                                                                                                polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              systemic infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              New histatin polynucleotides and polypeptides expressed in bovine tissues, useful for treating bacterial or fungal infections in mammals, e.g. infections of the oral cavity, vagina, urethra, ear or skin, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Glenn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     23-AUG-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19-FEB-2002; 2002US-0079754
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        07-NOV-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (GENE-) GENESIS RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2003-275306/27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Z,
                               38
                                                                 18;
                                                                                 Similarity
                 FQQYQPYQRYPLNYPPAYP 56
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Page 14; 17pp;
FOOYOPYERYPLNYPPAYP 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Grigor MR,
                                                                                                                                    21
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; 2000US-0644190.
; 2000US-0699146.
                                                                  Conservative
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                                                                               35.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Molenaar AJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               English
                                                                 1,
                                                                               Score 112;
Pred. No. 3
                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Davis
                                                                                 DB 24;
3.7e-07;
                                                                  0
                                                                                                Length
                                                                                                    21;
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                                                                  Gaps
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RRESULT 8
AX794529
ID AAY9
XX AAY9
XX AAY9
XX AAY9
XX Lysi
XX Lysi
XX Lysi
XX Lysi
XX Lysi
XX Lysi
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XX Y 22-C
XX 23-C
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Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              The present invention relates to human lysine-rich statherin protein (IRSP) (AAY94526). The cDNA sequence encoding this protein was identified through analysis of a cDNA library of breast tumour tissue (BRSTNOT14). The LRSP sequence was found to have homology with human statherin (the present sequence) and human basic histidine-rich protein (AAY94528). Human statherin is a phosphoprotein that acts as an inhibitor of precipitation of calcium phosphate salts in the oral cavity. The LRSP polypeptide and its antagonists may be useful for treating or preventing disorders associated with the activity of LRSP. Such disorders include autoimmune/inflammatory disorders (for example AIDS, allergies, asthma, diabetes meallitus), bacterial and fungal infection and cancers (such as leukemia, adenocarcinoma, melanoma). Antibodies to LRSP may be useful for diagnosis of the above disorders.
 23-OCT-1998;
                             22-OCT-1999;
                                                          04-MAY-2000.
                                                                                        WO200024779-A1
                                                                                                                  Homo sapiens
                                                                                                                                              Lysine-rich statherin protein; LRSP; acidic phosphoprotein; human; precipitation inhibitor; autoimmune; inflammatory disorder; AIDS; asthma; allergy; diabetes mellitus; fungal; bacterial infection; cancer; leukemia; adenocarcinoma; melanoma.
                                                                                                                                                                                                                       Human basic histidine-rich protein.
                                                                                                                                                                                                                                                  06-OCT-2000
                                                                                                                                                                                                                                                                                AAY94528;
                                                                                                                                                                                                                                                                                                             AAY94528 standard; protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Disclosure; Page 70; 75pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Purified polypeptide used for treating or preventing a disorder characterized by expression or activity of lysine-rich statherin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     N-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Tang YT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        23-OCT-1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    22-OCT-1999;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 04-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WO200024779-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2000-350699/30
                                                                                                                                                                                                                                                                                                                                                                                 l Similarity
27; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Corley NC,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                    (first entry)
   98US-0155209
                              99WO-US24046
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       98US-0155209
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                                                                                                                                                                                                                                                                                                                                                                                                                                                         34.8%;
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                                                                                                                                                                                                                                                                                                             51
                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 110; DB 21;
Pred. No. 2.1e-06;
7; Mismatches 19;
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                                                                                                                                                                                                                                                                                                                                                                                                                                             19;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 62;
                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
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AAM23999
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Matches
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                        Cao
                        Tang YT,
Cao Y, I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              sequence). Human statherin is a phosphoprotein that acts as an inhibitor of precipitation of calcium phosphate salts in the oral cavity. The IRSP polypeptide and its antagonists may be useful for treating or preventing disorders associated with the activity of IRSP. Such disorders include autoimmune/inflammatory disorders (for example AIDS, allergies, asthma, diabetes mellitus), bacterial and fungal infection and cancers (such as leukemia, adenocarcinoma, melanoma). Antibodies to IRSP may be useful for diagnosis of the above disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  The present invention relates to human lysine-rich statherin protein (LRSP) (AAY94526). The cDNA sequence encoding this protein was identified through analysis of a cDNA library of breast tumour tissue (BRSTNOT14). The LRSP sequence was found to have homology with human statherin (AAY94527) and human basic histidine-rich protein (the present (AAY94527)).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Tang
                                                                                                                                                                                                                                                                      Human; sheep; pig; cow; fruit fly; yeast; hamster; macaque; tomato; monkey; dog; sea urchin; expressed sequence tag; ES; diagnostics; forensic test; gene mapping; genetic disorder; biodiversity; gene therapy; nutrition.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence
WPI; 2001-476164/51
                                                                                          25-JAN-2000; 2000US-0491404.
17-JUL-2000; 2000US-0617746.
03-AUG-2000; 2000US-0631451.
15-SEP-2000; 2000US-0663870.
                                                                                                                                                                                                                                             Homo sapiens.
                                                                                                                                                                                                                                                                                                                                           Human EST encoded
                                                                                                                                                                                                                                                                                                                                                                                                 AAM23999;
                                                                                                                                                                                                                                                                                                                                                                                                                          AAM23999 standard;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Purified polypeptide used for characterized by expression
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N-PSDB; AAA48965.
                                                                                                                                                             25-JAN-2001; 2001WO-US02687.
                                                                                                                                                                                        02-AUG-2001.
                                                                                                                                                                                                                   WO200154477-A2
                                                                                                                                                                                                                                                                                                                                                                      12-OCT-2001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure; Page 71; 75pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (INCY-) INCYTE PHARM
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                      T, Liu C, Zh
Drmanac RA,
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22; Conserv
                                                               DESAH
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MKFFVFALILALMLSMTGADSHAKRHHGYKRKFHEKHHSHRGYRSNY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 30.1%;
nilarity 46.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                    (first entry)
                                                               INC.
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                        Zhou P,
RA, Zhang
                                                                                                                                                                                                                                                                                                                                         protein SEQ ID NO: 1524.
                                                                                                                                                                                                                                                                                                                                                                                                                          Protein;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                INC.
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                        Qian XB,
J, Werhm
                                                                                                                                                                                                                                                                                                                                                                                                                          51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 95; DB 21;
Pred. No. 0.00013;
6; Mismatches 13
                      Werhman
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                         Wang
an T;
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y of lysine-rich statherin
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                                       Chen
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JD AAU99983
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Best Local
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The invention describes new transplant compositions comprising antimicrobial polypeptides or pore forming agents and/or cell surface receptor binding compounds. The media is capable of extending the preservation period past 72 hours and can provide organs with increased functionality upon transplant, animals receiving kidneys stored in the media of the present invention for either three or four days had serum creatinine levels of less than half of those observed in control animals receiving kidneys stored in UW solution (defined in the specification)
                                                                                                                                                                                                                                                                                                    Media comprising antimicrobial polypeptides or and/or cell surface receptor binding compounds and preservation of organs prior to transplant
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     28-JUL-2000; 2000US-221632P.
17-NOV-2000; 2000US-249602P.
15-MAY-2001; 2001US-290932P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             proteins from a variety of organisms, including human, dog, cat, he cow, pig, hamster, monkey, macaque, yeast, bacteria, fruit fly, sea urchin and tomato. These were derived from expressed sequence tags from the organism of interest. They can be used in diagnostics, forensics, gene mapping, identification of mutations, to assess biodiversity and for nutritional purposes. The present sequence is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Transplant; antimicrobial cell surface receptor bind
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim
                                                                                                                                                                                                                                                      Disclosure; Page 26;
                                                                                                                                                                                                                                                                                                                                                                                                                          WPI; 2002-268995/31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Murphy CJ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27-JUL-2001; 2001WO-US23785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           07-FEB-2002.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cardioplegia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Transplant
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-PSDB; AAH98658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               WO200209738-A1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (MURP/) MURPHY C J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20; Page 1051; 1275pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MKIFIFVFIMALILAMIRADSSEEKRH-RKRKKH-----HRGYFQQY 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        22;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      media associated antimicrobial peptide #19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Reid TW,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A,
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                                                                                                                                                                                                                                                      78pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      pial peptide; pore forming agent;
binding compound; kidney transpl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mcanulty
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Pred. No. 0.00013;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            rejection
                                                                                                                                                                                                                                                                                                                                    pore forming agents useful for the storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 51;
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3

Best Local Similarity

32.

Score Pred.

94.5; DB 24; No. 0.00024;

Length

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                                                   The present invention relates to novel human GENSET coding sequences (ACC51060-ACC51115) and proteins (ABR48453-ABR48508). The GENSET sequences are useful for preparing a composition for treating GENSET-related disorders. They can also be used as markers for tissues in which the corresponding protein is preferentially expressed, as molecular weight markers on Southern gels, as chromosome markers or tags to identify chromosomes, and as reagents in assays to quantitatively determined levels of GENSET expression in biological samples.
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                                                                                                                                                                                                                                                                                                                                                                                                     New GENSET polynucleotides and polypeptides, useful for preparing composition for treating GENSET-related disorders and as reagents assays to quantitatively determined levels of GENSET expression in
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15-JUN-2001; 2001US-298698P
29-JUN-2001; 2001US-302277P
13-JUL-2001; 2001US-305456P
Sequence
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21-FEB-2003
                        ABP76149;
                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                       The present invention relates to novel GENSET polynucleotides (ABZ36404-ABZ36911) encoding polypeptides (ABP75963-ABP76368). The polynucleotides and polypeptides are useful in screening and diagnostic assays for abnormal GENSET expression and/or biological activity. They are also useful for screening of compounds for treating or preventing GENSET-related disorders, such as heavy metal toxicity, cancer, inflammatory diseases, immune disorders, and the neuromuscular, central
                                                                                                                                                                                                                                                                                                                                                       Claim 14; Page 410; 735pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                            metal
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                                                             Sequence
                                                                                                                                                                                                                                                                                            New GENSET polynucleotides and polypeptides, useful for treating heavy metal toxicity, cancer, inflammatory diseases, immune disorders, and the neuromuscular, CNS, cardiovascular or gastrointestinal effects of
                                                                                                                                                                                                                                                  Claim 14; Page 542; 735pp;
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1 Similarity 18; Conserv
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ilarity 32.7%;
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ABP64966
ID ABP6
Human; expressed sequence tag; EST; haematopoietic disorder; central nervous system disease; viral infection;
                                                            antiallergic; antiinflammatory; immunosuppressive; neuroprotective;
cytostatic; haemostatic; virucide; antibacterial; fungicide;
                                                                                            peripheral nervous system disease; non-healing wound; infectious disease; immune deficiency; immune disorder; bacterial infection; allergy; cancer; fungal infection; autoimmune disorder; coagulation disorder; nootropic;
             Homo sapiens
                                                                                                                                                                                               Human protein
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                                               .mmunostimulant;
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MKFFVFALVLALMISMISADSHEKRHHGYRRKFH-----EKHHSYHITLLPLF 48 MKIFIFVFIMALILAMIRADSSEEKRHRKRKKHHRGYFQQYQPYQRYPLNYPPAY 55

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CC (ABG99668) and proteins (ABP64682-ABP65022). The sequences are CC (ABG99668) and proteins (ABP64682-ABP65022). The sequences are CC (ABG99668) and proteins disprostic and research methods. The polynucleotides may be used in the field of molecular biology as CC phybridisation probes, primers for PCR, for chromosome and gene mapping, CC for the recombinant production of protein, or in generation of anti-sense CC DNA or RNA. The polynucleotides are useful in diagnostics as expressed CC sequence tags (ESTS) for identifying expressed genes or for physical CC markers, or as nutritional sources or supplements. The proteins may be used as molecular weight CC markers, or as nutritional sources or supplements. The proteins may be used to maintain and expand cell population in a totipotential or the CC tissues, transplantation, manufacture of bio-pharmaceuticals or the CC development of bio-sensors. The polynucleotides and proteins are useful for preventing, treating or ameliorating disorders involving aberrant CC protein expression or biological activity, e.g. haematopoietic disorders, central/peripheral nervous system diseases, mechanical and traumatic disorders, non-healing wounds, immune deficiencies and disorders, contral/peripheral nervous system diseases, mechanical and traumatic disorders, or cancer. The polynucleotide sequences of the invention were assembled from ESTs isolated mainly by sequencing by hybridiation, and in some cases, sequences obtained from one or more public databases.

CC set from who isolated mainly by sequencing by hybridiation, and in form the polynucleotide in decrease of the printed specification, but was obtained from one or more public of the printed are fermences.
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                     Drosophila; developmental biology; cell signalling; insecticide; pharmaceutical.
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                                                                                Drosophila melanogaster polypeptide SEQ ID NO 36585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence
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N-PSDB; ABQ99552.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ftp.wipo.int/pub/published_pct_sequences
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                present invention relates to novel human coding 099268-ABQ99608) and proteins (ABP64682-ABP65022)
                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
                                                                                                                                                                                                                                                                                                                                                  MKIFIFVFIMALILAMIRADSSEEKRHRKRKKHHRGY--FQQYQPYQRYPLNYPPAY 55
                                                                                                                                                                                                                                                                                                           Goodrich RW,
se AJ, Yang Y,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             62 AA;
                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                         (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                             27.2%;
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                                                                                                                                                                                                                                                                                                                                                                                          Score 86; DB 23;
Pred. No. 0.0022;
5; Mismatches 26
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lan T,
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                                                                                                                                                                                                                                                                                                                                                                                                                                Length 62,
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Best Local Similarity
                                                                                                                                                                                                                                                  The invention relates to an isolated nucleic acid detection reagent capable of detecting 1000 or more genes from Drosophila. The invent useful in developmental biology and in elucidating cell signalling cell-cell interactions in higher eukaryotes for the development of insecticides, therapeutics and pharmaceutical drugs. The invention discloses genomic DNA sequences (ABLIG176-ABL30511), expressed DNA sequences (ABLIG1840-ABL16175) and the encoded proteins
                                                                                                                                                                                                                                                                                                                                                                                                   genes from Drosophila and
                                                                                                                                                                  Sequence
                                                                                                                                                                                                           The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO
                                                                                                                                                                                                                                                                                                                                                                Disclosure; SEQ ID NO 36585; 21pp + Sequence Listing; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    23-MAR-2000; 2000US-191637P
11-JUL-2000; 2000US-0614150
                                                                                                                                                                                            at ftp.wipo.int/pub/published_pct_sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     N-PSDB; ABL14034.
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70
                          41 --YQPYQRYPLNYP----PAYPF 57
                                                                                                             23;
                                                                                 7 VFIMALILAMIRAD------SSEEKRHRKRKKHHR------GY--FQQ-----
                                                      LLVLLLQYEVVRTDSDSSDSSSSSSSSSKKKKKSKTEHKYNYPAYPNPGYPPYQEMGGYPS
YLYNPYMPYP-PYPQMGGYPSYPY
                                                                                                                                                                   192 AA;
                                                                                                             Conservative
                                                                                                                         23.7%;
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                                                                                                             12; Mismatches
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Pred. No.
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92
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Search completed: December 13, 2003, 03:07:17 Job time : 49 весв

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Maximum Match 100%
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GenCore version 5.1.6 (c) 1993 - 2003 Compugen Ltd.
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       US-07-962-569A-8
US-08-308-883-2
US-08-300-163-2
US-08-256-799-2
US-08-462-437-3
US-09-252-991A-2785
US-09-252-991A-27348
US-09-252-991A-27419
US-09-252-991A-27419
US-09-252-991A-30311
US-09-252-991A-30311
US-09-252-991A-30399
US-09-252-991A-30799
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160, Appl
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20348, A
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27419, A
20394, A
30311, A
          6, Appli
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                                                            Matches
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                                MKIFIFVF-IMALILAMIRADSSEEKRHRKRKKHHRGYFQQYQPYQRYPLNY-PPAYPF
          MKSFLLVVNALALTLPFLAVEVQNQKQPACHENDERPFYQKTAPY--VPMYYVPNSYPY
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Result No.

.45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28
54	54	54	54	54	54	54	54	54	54	54	54.5	54.5	54.5	55	55	55	55
17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.2	17.2	17.2	17.4	17.4	17.4	17.4
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US-09-467-946-1	US-09-162-373-1	PCT-US93-08174-25	US-08-452-930-25	US-08-086-631-25	US-08-453-956-25	US-09-549-848B-6	US-09-252-991A-29075	US-09-252-991A-32293	US-09-252-991A-29952	US-09-252-991A-20859	US-09-252-991A-27610	US-09-252-991A-23488	US-09-134-001C-3597	US-09-252-991A-18391	US-09-252-991A-17181	US-09-685-836-1	US-08-866-928B-1
Sequence 1	Sequence 1	Sequence 2	Sequence 2	Sequence 2	Sequence 2	Sequence 6	Sequence 2	Sequence 3	Sequence 2		Seguence 2	Sequence 2	Sequence 3	Sequence 1	Sequence 1	Sequence 1	Sequence 1
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ALIGNMENTS

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Sequence 8, Application US/07962569A
Patent No. 5391497
GENERAL INFORMATION:
APPLICANT: MENON, RAVI S.
APPLICANT: JEFFERS, KATHLEEN F.
APPLICANT: CHANG, YING-FON .
APPLICANT: HAM, RICHARD G.
TITLE OF INVENTION: HUMAN K-CASEIN
                                                                                US-07-962-569A-8
                                                                                                                                                                                                             FILING LALL.

CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:

NAME: PEPPER PH.D., FREDERICK W.
NAME: PEPPER PH.D., FREDERICK W.
NEGISTRATION UNMBER: 31,286
REGISTRATION INFORMATION:
REFERENCE/DOCKET NUMBER: 920224.01
TELECOMMUNICATION INFORMATION:
TOTARDHONE: (619) 451-1120
                                                                                                                                                                                                                                                                                                                                                                            COUNTRY: USA
ZIP: 92127
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIA Release #1.0, Vers
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/962,569A
FILING DATE: 19921013
                                                                                                                                                                              TELEFAX: (619) 451-9628
INFORMATION FOR SEQ ID NO: 8:
SEQUENCE CHARACTERISTICS:
                                                                                               TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: FREDERICK W. PE
STREET: 11545 W. BERNARDO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CITY: SAN DIEGO
STATE: CA
                                                                                                                                                             LENGTH:
                    Similarity
                                                                                                                                      : 182 amino acids
AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         HUMAN K-CASEIN
                    19.9%;
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DO COURT, STE.
                                                                                                                                                                                                                                                                                   920224.01
  Score 63; DB 1;
Pred. No. 1.9;
3; Mismatches 2
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                                       Length 182;
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US-08-308-883-2
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.4
COMPUTER: Apple MacIntosh
OPERATING SYSTEM: MacIntos
SOFTWARE: Clarisworks 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA: No. 5
TELECOMMUNICATION INFORMATION:
TELEPHONE: (614) 624-3774
                                                                                                                                             CLONE:
POSITION IN GENOME:
CHROMOSOME/SEGMENT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION DATA: APPLICATION NUMBER: US
                              PUBLICATION INFORMATION:
                                                                                                                                                                                                     ORGANELLE:
IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                    FRAGMENT TYPE:
DRIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                 HAPLOTYPE:
TISSUE TYPE:
CELL TYPE:
CELL LINE:
                                                                                                                                                                                                                                                                                                                                                                                NTI-SENSE:
                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: Li
DESCRIPTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEPHONE: (614) 624-3074
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY:
ZIP: 432
                                        LOCATION:
IDENTIFICATION METHOD:
OTHER INFORMATION:
AUTHORS: L. Hansson et al TITLE: DNA Encoding Kappa-Casein,
                                                                                                                                 MAP POSITION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE:
                                                                                       NAME/KEY:
                                                                                                                                                                                                                                                                                          INDIVIDUAL ISOLATE:
DEVELOPMENTAL STAGE:
                                                                                                                                                                                                                                                                                                                                      ORGANISM:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    STRANDEDNESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 182 amino acids
TYPE: Amino acid
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5. 5576300
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         E: ROSS Products Division
E: Abbott Laboratories
625 Cleveland Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cummings, R.U.
/ENTION: Method for Inhibition of Human Rotavirus Infection
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Baxter,
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                                                                                                                                                                                                                                                                                                                                                                                                                          Protein.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MacIntosh System 7.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.44 Mb storage
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5576300 applicable
 Process for Obtaining the Protein and
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Best Local (
                                                                                                                                                                                                                                                                                     TELEFAX: (614) 624-307
TELEX: No. 5712250e
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch, 1.44 Mb storage (B) COMPUTER: Apple Macintosh
OPERATING SYSTEM: MacIntosh System 7.1(D) SOFTWARE: ClarisWorks 1.0
CURRENT APPLICATION DATA:
                                                                                                 ANTI-SENSE: FRAGMENT TYPE: ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION UMBER: US/08/308,882
FILING DATE: 16-SEP-1994
                                                                                                                                                  HYPOTHETICAL:
                                                                                                                                                                                     TOPOLOGY: L
                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS
                                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DOCUMENT NUMBER:
FILING DATE: 25-J
PUBLICATION DATE:
RELEVANT RESIDUES
                                 INDIVIDUAL ISOLATE: DEVELOPMENTAL STAGE:
HAPLOTYPE:
TISSUE TYPE:
                                                                  STRAIN
                                                                                                                                                                                                                                                                                                      TELEPHONE: (614) 624-3074
                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CITY: Columbus
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                                                                                                                                                                                                                  STRANDEDNESS
                                                                                   ORGANISM:
                                                                                                                                                                                                                                      LENGTH: 182 amino
TYPE: Amino acid
                                                                                                                                                                     DESCRIPTION:
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17; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MKSFLLVVNALALTLPFLAVEVQNQKQPACHENDERPFYQKTAPY--VPMYYVPNSYPY
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Application US/08730163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ohio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           E: Abbott Laboratories 625 Cleveland Avenue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ION DATE: 05-AUG-1993
RESIDUES IN SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            United States
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Cummings, R.D. 
MENTION: Product for Inhibition of Human Rotavirus Infection.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Prieto,
                                                                                                                                                                                                      Linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ROSS Products Division
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lonnie R.
                                                                                                                                                                                                                                                                                                                                       (614) 624-3774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               धर: PCT/WO93/15196
25-JAN-1993
                                                                                                                                                                                     Protein
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28.8%; Pred. No. 1.9;
ative 13; Mismatches
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CELL TYPE:

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                           APPLICATION NUMBER: US/08/
FILING DATE: 06-DEC-1994
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: DK 88/
FILING DATE: 23-JAN-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tent No.
                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: DM.
TITLE OF INVENTION: OB:
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CELL LINE:
ORGANELLE:
IMMEDIATE SOURCE:
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CHROMOSOME/SEGMENT:
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RELEVANT RESIDUES IN SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 25.
PUBLICATION DATE
            NAME: COOPER, IVER P. REGISTRATION NUMBER: 28,005
                                                                                                                                                                                                                                                                                         COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DOCUMENT NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AUTHORS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MAP POSITION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LIBRARY:
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ISSUE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 MKIFIFVF-IMALILAMIRADSSEEKRHRKRKKHHRGYFQQYQPYQRYPLNY-PPAYPF 57
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                                                                                                                                                                                                                                                                                                                    Washington
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                                                                                                                                                                                                                                                                                                                                         419 Seventh Street, N.W., Suite 300
                                                                                                                                                                                                                                                                                                                                                                                                                                              HERNELL, Olle
Toernell, Jan
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BERGSTROEM, Sven
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                                                                                                                                                                                                                                                                                                                                                           BROWDY AND NEIMARK
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25-JAN-1993
                                                                                                                                                                                                                                                                                                                                                                                                            DNA ENCODING KAPPA-CASEIN, PROCESS FOR OBTAINING THE PROTEIN AND USE THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Lennart
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                                                                                DK 88/92
                                                                                                                                                 US/08/256,799
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HANSSON=1
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RESULT 5
US-08-462-437-2
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                                                                            ; MOLECULE TYPE: protein US-08-462-437-2
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Query Match
Best Local Similarity
Matches 17; Conserv
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                                                                                                                                                                                             INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS.
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/462,437
FILING DATE: 05-JUN-1995
PRIOR APPLICATION DATA:
                                                                                                                                                       SEQUENCE CHARACTERISTICS:
LENGTH: 182 amino acid
                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: DK 88/92
FILING DATE: 23-JAN-1992
ATTORNEY/AGENT INFORMATION:
NAME: COOPER, Iver P.
REGISTRATION NUMBER: 28,005
REFERENCE/DOCKET NUMBER: HANN
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: DNA ENCODING KAPPA-CASEIN, PROCESS TITLE OF INVENTION: FOR OBTAINING THE PROTEIN AND USE THEREOF NUMBER OF SEQUENCES: 31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
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                                                                                                                        TOPOLOGY:
                                                                                                                                     TYPE: amino acid
                                                                                                                                                                                                                                  TELEFAX:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: Washington
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TOPOLOGY: linear
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MKIFIFVF-IMALILAMIRADSSEEKRHRKRKKHHRGYFQQYQPYQRYPLNY-PPAYPF 57
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419 Seventh Street, N.W., Suite 300
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BERGSTROEM, Sven
HERNELL, Olle
                                                                                                                                                                                                                                    : 202-628-5197
202-737-3528
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       Conservative
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                                                                                                                    linear
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   19.9%; Score 63; DB 3; Length 182;
28.8%; Pred. No. 1.9;
Ltive 13; Mismatches 25; Indels
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       4.
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     Gaps
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1 MKIFIFVF-IMALILAMIRADSSEEKRHRKRKKHHRGYFQQYQPYQRYPLNY-PPAYPF 57

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MKSFLLVVNALALTLPFLAVEVQNQKQPACHENDERPFYQKTAPY--VPMYYVPNSYPY 57

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US-09-252-991A-27856
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                                                                                                                                                                                  Sequence 27856, Ap
Patent No. 6551795
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                                                                                                        SENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: Patentin Release #1.0, Ve:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/462,437
FILING DATE: 05-JUN-1995
PRIOR APPLICATION DATA:
APPLICATION NUMBER: DK 88/92
FILING DATE: 23-JAN-1992
ATTORNEY/AGENT INFORMATION:
ANALY. COORDER TOORNEY/AGENT INFORMATION:
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                                                    FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TELEX: 248633
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 182 amino acids
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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 APPLICATION NUMBER:
                 APPLICATION NUMBER: UFILING DATE: 1998-02
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     amino acid
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BERGSTROEM, Sven
HERNELL, Olle
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                     Application US/09252991A
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9 Seventh Street, N.W.,
                                                                                          107196.136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              . Iver P. 28,005
                                                                                                                                                                                                                                                                                                                                                                                           19.9%; Score 63; DB 3; Length 182. 28.8%; Pred. No. 1.9;
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                   US 60/074,788
02-18
US .60/094,190
                                                                                                                                                                                                                                                                                                                                                                          13; Mismatches
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; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-27856
                                                                                              ; ORGANISM: Pseudomonas aeruginosa US-09-252-991A-16848
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; ORGANISM: Ashbya gossypii
US-09-625-188-20
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SEQ ID NO 20
LENGTH: 729
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NUMBER OF SEQ ID NOS:
SEQ ID NO 27856
                                    Matches
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SEQ ID NO 16848
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GENERAL INFORMATION:
                                                              Query Match
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Best Local :
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                                                                                                                                                                                                                                             FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
                                                                                                                                                                                    PRIOR FILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US 60/074,788 PRIOR FILING DATE: 1998-02-18
                                                                                                                                                                                                                                                                                            APPLICANT: MATC J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: PB/5-31285P1
CURRENT APPLICATION NUMBER: US/09/625,188
CURRENT FILING DATE: 2000-07-21
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                                                                                                                            TYPE: PRT
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ADSSEEKRHRKRKKH--HRGYFQQ-YQPYQRYPLNYPPAYP 56
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                                Score 59.5; .DB Pred. No. 7.9; 8; Mismatches
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Pred. No. 13;
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Pred. No.
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RESULT 12
US-09-252-991A-27419
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US-09-252-991A-21881
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PRIOR FILING DATE: 1998-07; NUMBER OF SEQ ID NOS: 3314; SEQ ID NO 21881
LENGTH: 720; TYPE: PRT
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               Sequence 27419, Application US/09252991A
PATENT NO. 6551795
GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AL
TITLE OF INVENTION: AERUGINOSA FOR DIAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
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Best Local (
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CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELAT
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
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CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
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TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: PRIOR FILING DATE: 1998-0
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ORGANISM: Pseudomonas aeruginosa
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REFERENCE:
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o. 6551795
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                                                                                                                                                                                                                                                                                                            Conservative
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      Rubenfield et al.

NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
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NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
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Pred. No.
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Pred. No.
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APPLICANT: WAITC J. Rubenfield et al.
APPLICANT: WAITC J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AMINO ACID SEQUENCES RELATING TO PSEL
TITLE OF INVENTION: ABRUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 30311
LENGTH: 521
TYPE: PRT
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US-09-252-991A-30311
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US-09-252-991A-20994
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LENGTH: 333
TYPE: PRT
ORGANISM: Pseudomonas aeruginosa
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Patent No. 6551795
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ORGANISM: Pseudomonas aeruginosa
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                        25 KRHRKRK---KHHRGYFQQYQPYQRYPLNYP 52
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60 RRDTDGQRRHPRRRLDHRHRRQQQPP---HPLN 89
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NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
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1998-07-27
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Pred. No. 13;
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Pred. No. 9
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GENERAL INFORMATION:

APPLICANT: Height, Peter
APPLICANT: Madden, Kevin
APPLICANT: Madden, Kevin
APPLICANT: Fink, Gerald
TITLE OF INVENTION: CHIMERIC PRE-ACTIVATED TRANSCRIPTION
TITLE OF INVENTION: PACTORS
FILE REFERENCE: 50078/004002
CURRENT APPLICATION NUMBER: US/09/196,270
CURRENT APPLICATION NUMBER: 60/066,129
EARLIER APPLICATION NUMBER: 60/066,308
EARLIER FILING DATE: 1997-11-19
EARLIER FILING DATE: 1997-11-21
EARLIER FILING DATE: 1997-11-24
NUMBER: 60/066,462
EARLIER FILING DATE: 1997-11-24
NUMBER: FILING DATE: 1997-11-24
NUMBER OF SEQ ID NOS: 24
NUMBER OF SEQ ID NOS: 24
NUMBER OF SEQ ID NOS: 24
CEQ ID NO 4
LENGTH: 585
TYPE: PRT
ORGANISM: Yarrowia lipolytica
US-09-196-270-4
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Search completed: December 13, 2003, 03:09:38 Job time : 22 secs
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US-09-196-270-4
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                                                                                                                                                                                                Query Match 18.4%; Score 58; DB 4; Length 585; Best Local Similarity 34.9%; Pred. No. 28; Matches 15; Conservative 6; Mismatches 18; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 4, Application US/09196270 Patent No. 6500636 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 18.4%; Score 58; DB 4; Length 521; Best Local Similarity 36.7%; Pred. No. 25; Matches 18; Conservative 6; Mismatches 21; Indels
                                                                                                     235 ADDNEQAHNAYAKPHMQHTHQQQQQQQRY-MQYPTYASGYEYP 276
                                                                                                                                        19 ADSSEEKRHRKRKKHHRGYFQQYQPYQRYPLNYP---PAYPFP 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    45 LIRTIAAQGVEIVEHRHRHERLHHQHPLRQRRQLQRQ--RHRPAHQRP 91
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Maximum DB
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169
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1: /cgn2_6/ptodata/2/pubpaa/USO7_PUBCOMB.pep:*

2: /cgn2_6/ptodata/2/pubpaa/USO6_NEW_PUB.pep:*

3: /cgn2_6/ptodata/2/pubpaa/USO6_NEW_PUB.pep:*

4: /cgn2_6/ptodata/2/pubpaa/USO6_PUBCOMB.pep:*

5: /cgn2_6/ptodata/2/pubpaa/USO7_NEW_PUB.pep:*

6: /cgn2_6/ptodata/2/pubpaa/USO8_NEW_PUB.pep:*

7: /cgn2_6/ptodata/2/pubpaa/USO8_PUBCOMB.pep:*

9: /cgn2_6/ptodata/2/pubpaa/USO8_PUBCOMB.pep:*

9: /cgn2_6/ptodata/2/pubpaa/USO8_PUBCOMB.pep:*

10: /cgn2_6/ptodata/2/pubpaa/USO9B_PUBCOMB.pep:*

11: /cgn2_6/ptodata/2/pubpaa/USO9B_PUBCOMB.pep:*

12: /cgn2_6/ptodata/2/pubpaa/USO9B_PUBCOMB.pep:*

13: /cgn2_6/ptodata/2/pubpaa/USO9B_PUBCOMB.pep:*

14: /cgn2_6/ptodata/2/pubpaa/USO0_NEW_PUB.pep:*

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18: /cgn2_6/ptodata/2/pubpaa/USO0_NEW_PUB.pep:*
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Match Length
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4 US-10-079-754A-7

US-10-079-754A-10

US-10-079-754A-12

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1 US-09-92-600A-6

2 US-09-92-92-9340-6

2 US-09-92-93-98-6

2 US-09-932-058-6

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2 US-10-154-678-6

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5 US-10-142-077-33
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39.084 Million cell updates/sec
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           Sequence 19, Appli
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Sequence 10, Appli
Sequence 8, Appli
Sequence 12, Appli
Sequence 9, Appli
Sequence 11, Appli
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55	55.5	56	56	56	56	56	56	56	56	56	56	56	56	56.5	56.5	56.5	56.5	56.5	56.5	57.5	58	58	58	58	58	60.5	63	63	63
17.4	17.6	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7	17.7		17.9	17.9	17.9	17.9	17.9	17.9	18.2	18.4	18.4	18.4	18.4	18.4	19.1	19.9	19.9	19.9
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228,	4	е 2	2; Ap	ń	e 225,	164,	225	164	e 29,		29	31	31	4	2	36	26		e 10	Sequence 12955, A	10	10	90	63	e 76	21,	e 52	e 51	Sequence 50, Appl

ALIGNMENTS

RESULT 1 US-10-079-754A-7

Sequence 7, Application US/10079754A Publication No. US20020164625A1

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GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Glenn, Matthew

APPLICANT: Grigor, Murray R.

APPLICANT: Molenaar, Adrian J.

APPLICANT: Molenaar, Adrian J.

APPLICANT: Davis, Stephen R.

TITLE OF INVENTION: Compositions Isolated from Bovine

ITLE OF INVENTION: Mammary Gland and Methods for Their

FILE REFERENCE: 11000.1068

CURRENT APPLICATION NUMBER: US/10/079,754A

CURRENT FILING DATE: 2002-02-19

PRIOR APPLICATION NUMBER: US 60,162,701

PRIOR FILING DATE: 1999-10-29

PRIOR FILING DATE: 1999-10-29

PRIOR FILING DATE: US 09/644,190

PRIOR FILING DATE: US 60,150,330

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Matches
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SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 7
                                                                                                                                           Query Match
                                                                                                                                                                                                              LENGTH: 58
TYPE: PRT
ORGANISM: Bovine
                                                                                                                       Local Similarity
100.0%; silarity 100.0%; silarity 100.0%; sometime o;
                                                                                           Score 316; DB 1
Pred. No. 3e-30;
Mismatches
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Sequence

RESULT 2 US-10-079-754A-10

Application US/10079754A

US20020164625A1

APPLICANT: Glenn, Matthew APPLICANT: Grigor, Murray

Grigor, Murray R.

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US-10-079-754A-8
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CURRENT FILING DATE: 2002-02-19
PRIOR APPLICATION NUMBER: US 09/699,146
PRIOR FILING DATE: 2000-10-27
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR FILING DATE: 1999-10-29
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR APPLICATION NUMBER: US 60,150,330
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LENGTH: 58
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Best Local Similarity
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    Matches
                       Query Match
Best Local Similarity
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Publication No. US20020164625A1
                                                                                                         LENGTH: 58
TYPE: PRT
ORGANISM: Bovine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Molenaar, Adrian J.
APPLICANT: Davis, Stephen R.
TITLE OF INVENTION: Compositions Isolated from Bovine
TITLE OF INVENTION: Mammary Gland and Methods for Their Use
FILE REFERENCE: 11000.1068
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PRIOR FILING DATE: 2000-10-27
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR FILING DATE: 1999-10-29
                                                                                                                                                                                                     NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Glenn, Matthew APPLICANT: Grigor, Murray
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CURRENT FILING DATE: 2002-02-19
                                                                                                                                                                                                                                               PRIOR FILING DATE: 1999-08-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: Compositions Isolated from Bovine TITLE OF INVENTION: Mammary Gland and Methods for Their Use FILE REFERENCE: 11000.1068
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: US 09/644,190 FILING DATE: 2000-08-22
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    57;
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Davis, Stephen R.
99.7%;
ilarity 98.3%;
Conservative
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                                                                                                                                                                                                     Windows Version 4.0
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  Score 315; DB 14;
Pred. No. 3.9e-30;
1; Mismatches 0;
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Pred. No. 3e-30;
                                           Length 58;
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                                                                                                                               CURRENT APPLICATION NUMBER: US/10/079,754A
CURRENT FILING DATE: 2002-02-19
PRIOR APPLICATION NUMBER: US 09/69,146
PRIOR FILING DATE: 2000-10-27
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR FILING DATE: 1999-10-29
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR FILING DATE: 1999-08-23
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 12 LENGTH: 59
                                                       NUMBER OF SEQ ID N
SOFTWARE: FASTSEQ
SEQ ID NO 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR FILING DATE: 1999-10-29
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR ETLING DATE: 2000-08-22
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR FILING DATE: 1999-08-23
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                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: Compositions Isolated from Bovine TITLE OF INVENTION: Mammary Gland and Methods for The FILE REFERENCE: 11000.1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Glenn, Matthew APPLICANT: Grigor, Murra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TITLE OF INVENTION: Compositions Isolated from TITLE OF INVENTION: Mammary Gland and Methods FILE REFERENCE: 11000.1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Grigor, Murray R.
APPLICANT: Molenaar, Adrian J.
APPLICANT: Davis, Stephen R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Glenn,
APPLICANT: Grigo
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                       LENGTH: 7
ORGANISM: Bovine
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Davis, Stephen R.
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US-10-079-754A-11
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PRIOR FILING DATE: 2000-10-27
PRIOR PELICATION NUMBER: US 60,162,701
PRIOR FILING DATE: 1999-10-29
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR FILING DATE: 2000-08-23
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR FILING DATE: 1999-08-23
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Best Local Similarity
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                                                                                                                                                                                      FILE REFERENCE: TPLANT-06468
CURRENT APPLICATION NUMBER: US/09/917,340
CURRENT FILING DATE: 2001-07-29
PRIOR APPLICATION NUMBER: 60/221,632
PRIOR FILING DATE: 2000-07-28
PRIOR FILING DATE: 2000-07-28
                                                                                                      PRIOR APPLICATION NUMBER: 60/249,602
PRIOR FILING DATE: 2000-11-17
PRIOR APPLICATION NUMBER: 60/290,932
PRIOR FILING DATE: 2001-05-15
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TITLE OF INVENTION: Compositions Isolated from Bovine
TITLE OF INVENTION: Mammary Gland and Methods for The
FILE REFERENCE: 11000.1068
CURRENT APPLICATION NUMBER: US/10/079,754A
CURRENT FILING DATE: 2002-02-19
                                                                                                                                                                                                                                                                                                APPLICANT: Murphy, Christopher J.
APPLICANT: McAnulty, Jonathan F.
APPLICANT: Reid, Ted W.
TITLE OF INVENTION: Transplant Media
                                                                                      NUMBER OF SEQ ID NOS: 96
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ORGANISM: Bovine
                        ENGTH: 51
                                          ID NO 19
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                                                                PatentIn
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97.1%;
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94.7%;
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Pred. No. 1.3e-06
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Pred. No. 8.8e-13;
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             ; APPLICANT: Tanaka, Hiroaki
; TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THE
; FILE REFERENCE: 91.US2.REG
; CURRENT APPLICATION NUMBER: US/09/924,340
; CURRENT FILING DATE: 2001-08-06
; PRIOR APPLICATION NUMBER: US 60/305,456
; PRIOR FILING DATE: 2001-07-13
; PRIOR APPLICATION NUMBER: US 60/302,277
; PRIOR APPLICATION NUMBER: US 60/302,277
; PRIOR APPLICATION NUMBER: US 60/298,698
; PRIOR APPLICATION NUMBER: US 60/298,698
; PRIOR FILING DATE: 2001-06-15
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PRIOR APPLICATION NUMBER: US 09/924,340
PRIOR TILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: PCT/IB01/01715
PRIOR APPLICATION NUMBER: DE 60/305,456
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR PILING DATE: 2001-07-13
PRIOR PILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR APPLICATION NUMBER: US 60/298,698
PRIOR APPLICATION NUMBER: US 60/298,698
PRIOR FILING DATE: 2001-06-15
PRIOR FILING DATE: 2001-06-15
PRIOR FILING DATE: 2001-06-15
                                                                                                                                                                                                                                                                        Sequence 6, Application US/09924340 Publication No. US20030027248A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: JPatent
SEQ ID NO 6
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TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.US4.DIV
CURRENT APPLICATION NUMBER: US/09/992,600A
CURRENT FILING DATE: 2001-11-13
                                                                                                                                                                                                                                APPLICANT: Bejanin, APPLICANT: Tanaka,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE: 2001-05-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: US 60/293,574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: SIGNAL LOCATION: 1..19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MKIFIFVFIMALILAMIRADSSEEKRHRKRKKHHRGYFQQYQPYQRYPLNYPPAY 55
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NUMBER: US 60/293,574
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 95; DB 9;
Pred. No. 0.00035;
6; Mismatches 13
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APPLICANT: TANAKA, HITOAKI
FILTE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.US5.DIV
CURRENT APPLICATION NUMBER: US/09/992,095B
CURRENT FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: US 09/924,340
PRIOR APPLICATION NUMBER: US 09/924,340
PRIOR FILING DATE: 2001-08-06
PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: PCT/IB01/01715
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-29
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SOFTWARE: JPatent
SEQ ID NO 6
LENGTH: 78
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
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Publication:
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Benjanin, Stephane
APPLICANT: Tanaka, Hiroaki
APPLICANT: Tanaka, Hiroaki
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
                                                                                                                                                       Sequence 6, Application US/10154678
Publication No. US20030162186A1
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Best Local S
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Best Local (
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PRIOR PILING DATE: 2001-06-15
PRIOR APPLICATION NUMBER: US 60/293,574
PRIOR FILING DATE: 2001-05-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Benjanin, Stephane APPLICANT: Tanaka, Hiroaki
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TYPE: PRT
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; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SIGNAL
; LOCATION: 1..19
US-09-999-570-6
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PRIOR FILING DATE: 2001-08-06
PRIOR PELICATION NUMBER: PCT/IB01/01715
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-29
                                                                                               Query Match
Best Local Similarity
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SEQ ID NO 6
                                                                                    Matches
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SEQ ID NO 6
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Best Local Similarity
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ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SIGNAL
LOCATION: -19..-1
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CURRENT FILING DATE: 2002-10-15
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PRIOR APPLICATION NUMBER: US 60/293,574
PRIOR FILING DATE: 2001-05-25
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TITLE OF INVENTION: HUMAN CONAS AND PROTEINS
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                                   MKIFIFVFIMALILAMIRADSSEEKRHRKRKKHHRGYFQQYQPYQRYPLNYPPAY 55
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MKFFVFALVLALMISMISADSHEKRHHGYRRKFH-----EKHHSYHITLLPLF 48
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                                                                                  29.9%; Score 94.5; DB 12; 32.7%; Pred. No. 0.00064; tive 13; Mismatches 17;
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US-10-000-489-6

Sequence 6, Application US/10000489 Publication No. US20030092011A1

GENERAL INFORMATION:

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; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: SIGNAL
; LOCATION: 1..19
US-10-000-489-6
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LENGTH: 78
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Best Local Similarity
Matches 18; Conserv
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SOFTWARE: (
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CURRENT FILING DATE: 2001-11-14
PRIOR APPLICATION NUMBER: US 09/924,340
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CURRENT FILING DATE: 2001-11-14
PRIOR APPLICATION NUMBER: US 09/924,340
PRIOR FILING DATE: 2001-08-06
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APPLICANT: Tanaka, Hiroaki
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
                                                   NUMBER OF
                                                                    PRIOR APPLICATION NUMBER: US 60/293,574 PRIOR FILING DATE: 2001-05-25
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PRIOR FILING DATE: 2001-08-06
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APPLICANT: Tanaka, Hiroaki
TITLE OF INVENTION: HUMAN CONAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.US9.DIV
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                                                                                                                                                              APPLICATION NUMBER: US 60/305,456
FILING DATE: 2001-07-13
APPLICATION NUMBER: US 60/302,277
FILING DATE: 2001-06-29
                                                                                                                  APPLICATION NUMBER: US 60/298,698 FILING DATE: 2001-06-15
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FILING DATE: 2001-08-06
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                          JPatent
                                                SEQ ID NOS: 112
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Search completed: December 13, 2003, 03:14:20 Job time : 276 secs

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                                                                                                                                                                                                                         SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 33
LENGTH: 103
                                                                              Query Match 19.9%; Score 63; DB 15; Length 103; Best Local Similarity 54.2%; Pred. No. 4.6; Matches 13; Conservative 1; Mismatches 10; Indels
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Best Local Similarity
Matches 18; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                            FILE REFERENCE: 008010137US06
CURRENT APPLICATION NUMBER: US/10/142,077
CURRENT FILING DATE: 2002-05-08
                                                                                                                                                                                                                                                                                                                                                                                                            TITLE OF INVENTION: METHOD OF DETERMINING THE PRESENCE OF A
TITLE OF INVENTION: TRAIT IN A PLANT BY TRANSFECTING A NUCLEIC ACID SEQUENCE OF
TITLE OF INVENTION: A NON-PLANT DONOR INTO A HOST PLANT IN AN ANTI-SENSE
TITLE OF INVENTION: ORIENTATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Kumagai, Monto H.
APPLICANT: della-Cioppa, Guy R.
                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: US/09/359,297
PRIOR FILING DATE: 1999-07-21
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67 QGYPQQGYPQQGYPPPYAPQYPPP 90
                                      35 RGYFQQYQPYQRYPLNYPPAYPFP 58
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10. US20030077619A1
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nilarity 32.7%;
Conservative 13
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Pred. No. 0.000
13; Mismatches
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Command line parameters:

-WODEL=frame+ p2n.model -DEV=xlh
-Q=/cgn2_f/USPT0_socol/US10079754/runat 12122003 145752 13012/app_query.fasta_1.199
-Q=/cgn2_f/USPT0_cgn2_f/stata_1.199
-DB=GenEmb1 -OpWT=fastap_-SUFFIX=rge_-MINMATCH=0.1 -LOOPEL=0 -LOOPEXT=0
-UNITS=bite -START=1 -END=-1 -MARRIX=blosum62 -TRANS=human40.cdi -LIST=45
-DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15 -MODE=LOCAL
-OUTFMT=ptc -NORM=ext -HEARSIZE=500 -MINLEN=2000000000
-USER=USL0079754 @CCN 1 13508 @runat 12122003 145752 13012 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-PGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELEXT=7
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Maximum DB
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Listing first 45 summaries
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Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
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Copyright (c) 1993 - 2003 Compugen Ltd.
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32: em_htg_other: *
33: em htg_mus: *
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36: em htg_rod: *
37: em htg_vrt: *
38: em sy: *
39: em htg_ohum: *
41: em_htgo_mus: *
41: em_htgo_mus: *
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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ALIGNMENTS

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Barbaria, J.,

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Submitted (27-SEP-2002) Human Genome Sequencing
of Molecular and Human Genetics, Baylor College
of Molecular And Human Genetics, Baylor College
of Molecular and Human Genetics, Daylor Plaza, Houston, TX 77030, USA
                                                             Baylor Plaza, Houston, TX 770
----- Genome Center
Center: Baylor College of
Center code: BCM
                                                                                                                                                                                                                                                                                                                                                                               Submitted (24-SEP-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA
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Bos taurus clone RP42-254I13, WORKING DRAFT SEQUENCE, 26 unordered
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Direct Submission
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Bovidae; Bovinae; Bos.
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Web site: http://www.hgsc.bcm.tmc.edu/
Contact: hgsc-help@bcm.tmc.edu
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                                                                                                        of Medicine
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of Medicine,
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NOTE: Estimated insert size may differ from sequence length (see http://www.hgsc.bcm.tmc.edu/docs/Genbank_draft_data.h NOTE: This is a 'working draft' sequence. It currently consists of 26 contigs. The true order of the pieces is not known and their order in this sequence record is arbitrary. Gaps between the contigs are represented as runs of N, but the exact sizes of the gaps are unknown. This record will be updated with the finished sequence as soon as it is available and the accession number will be preserved.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Direct Submission
Submitted (24-SEP-2002) Molecular and Cellular Biology, Baylor
College of Medicine, One Baylor Plaza, Houston, TX 77030, USA
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               486
Bos taurus statherin (STATH)
AY154893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rijnkels,M., Elnitski,L., Miller,W. and Rosen,J.M. Multi-species comparative sequence analysis of the casein gene cluster region: A gene domain encoding epithelial secretory
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea; Bovidae; Bovinae; Bos.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rijnkels, M. and Rosen, J.M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bos taurus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TATCCATTTCCT 43588
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                                                                                           5 195534: contig of 29020 bp
Location/Qualifiers
                                                                                                                                                             /product="statherin"
/protein_id="AAN85581.1"
/db_xref="GI:27227455"
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/db_xref="taxon:9913"
/clone="RP42-254I13"
35784 c 36143 g 6004
                                                                                                                                                                                                                              gene="STATH"
codon_start=1
                                                                                                                                                                                                                                                                                                'gene="STATH"
                                                                                                                                                                                                                                                                                                                       tissue_type="salivary
                                                                                                                                                                                                                                                                                                                                                                    db_xref="taxon:9913"
chromosome="6"
                                                                                                                                                                                                                                                                                                                                                                                                                                   organism="Bos taurus"
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ORGANISM
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HUMSTTRNA
                                                                      Alignment Scores:
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Query Match:
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                                                                                                                                   BASE COUNT
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Best Local Similarity:
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    Percent Similarity:
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                                                                                                                                                                                                     mat_peptide
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ancestral sequence
Biochem. Biophys. Res. Commun. 149 (2),
88106506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 542)

Dickinson,D.P., Ridall,A.L. and Levine,M.J.

Human submandibular gland statherin and basic histidine-rich peptide are encoded by highly abundant mRNA's derived from a common peptide are encoded by highly abundant mRNA's derived from a common peptide are encoded by highly abundant mRNA's derived from a common peptide are encoded by highly abundant mRNA's derived from a common peptide are encoded by highly abundant mRNA's derived from a common peptide are encoded by highly abundant mRNA's derived from a common peptide are encoded by highly abundant mRNA's derived from a common peptide are encoded by highly abundant mRNA's derived from a common peptide are encoded by highly abundant mRNA's derived from a common peptide are encoded by highly abundant mRNA's derived from a common peptide are encoded by highly abundant mRNA's derived from a common period from a com
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   provided
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          statherin.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Original source text: Human female submandibuar gland,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3426601
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            clone pBRHSMSF9B8.2.
entry and computer readable copy of sequence [1] kindly ded by D.P.Dickinson 21-MAR-1988.
                                                                                                              ) a 117 c 76 g
upstream of PstI site;
                                                                                                                                                                                                     /note="statherin signal peptide" 114. .242
                                                                                                                                     /product="statherin"
117 c 76 g
                                                                                                                                                                                                                                                                                         /proteIn_id="AAA60600.1"
/db_xref="GI:338611"
/db_xref="GDB:00-120-391"
/translation="MKFLVFAFILALMVSMIGADSSEEKFLRRIGRFGYGYGPYQPVP
EQPLYPQPYQPQYQYTF"
                                                                                                                                                                                                                                                 gene="STATH"
                                                                                                                                                                                                                                                                                                                                                                                                                                                      gene="STATH"
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                                                                                                                                                                                    gene="STATH"
                                                                                                                                                                                                                                                                                                                                                                                                              codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                               note="statherin precurser"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    mol_type="mRNA"
db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 organism="Homo sapiens"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   gene="STATH"
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cDNA to

common

4q11-q13.

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REFERENCE
AUTHORS
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SOURCE
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US-10-079-754A-10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      117 TCATCTGAAGAGAAATTTTTGCGTAGAATTGGAAGATTCGGTTATGGGTAT----GGCCCT 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                41 TyrGlnProTyrGlnArgTyrProLeuAsnTyrProProAlaTyr 55
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 57
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sabatini, L.M., Carlock, L.R., Johnson, G.W. and Azen, E.A. CDNA cloning and chromosomal localization (4q11-13) of a gene statherin, a regulator of calcium in saliva Am. J. Hum. Genet. 41 (6), 1048-1060 (1987)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Original source text: Human parotid gland, cDNA to mRNA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             regulatory protein;
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             M18078.1
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(1-58)
                                                                                                                                                     /note="statherin signal peptide"
2 a 122 c 78 g 180 t
upstream of PstI site; chromosome 4q11-q13.
                                                                                                                                                                                                                                                                  /protein_id="AAA60594.1"
/db_xref="GI:338508"
/db_xref="GDB:G00-120-391"
                                                                                                                                                                                                                                                                                                                                                                                                       /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/map="4q11-q13"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
                                                                                                                                                                                                                                                    translation="MKFLVFAFILALMVSMIGADSSEEKFLRRIGRFGYGYGPYQPVP/
                                                                                                                                                                                                                                                                                                                  /codon_start=:
                                                                                                                                                                                                                                                                                                                             note="statherin protein"
                                                                                                                                                                                                    gene="STATH"
                                                                                                                                                                                                                                                                                                                                                 gene="STATH"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Submitted (04-JUL-2002) Takao Isogai, FLJ Project(HRI Team); 2-6-7 Kazusa-Kamatari, Kisarazu, Chiba 292-0812, Japan (B-mail:genomics@hri.co.jp, Tel:81-438-52-3975, Fax:81-438-52-3986) NEDO human cDNA sequencing project supported by Ministry of Economy, Trade and Industry of Japan; cDNA full insert sequencing: Research Association for Biotechnology (RAB); cDNA library construction: Helix Research Institute (HRI) (supported by Japan Key Technology Center etc.); 5'-& 3'-end one pass sequencing: RAB, HRI, and Biotechnology Center, National Institute of Technology and Evaluation; clone selection for full insert sequencing: HRI and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Oshima,A., Takahashi-Fujii,A., Tanase,T., Imose,N., Takeuchi,K., Arita,M., Musashino,K., Yuuki,H., Hara,H., Sugiyama,T., Irie,R., Otsuki,T., Sato,H., Wakamatsu,A., Ishii,S., Yamamoto,J., Isono,Y., Kawai-Hio,Y., Saito,K., Nishikawa,T., Kimura,K., Yamashita,H., Matsuo,K., Nakamura,Y., Sekine,M., Kikuchi,H., Kanda,K., Wagatsuma,M., Murakawa,K., Xanehori,K., Sugiyama,A., Kawakami,B., Suzuki,Y., Sugano,S., Nagahari,K., Masuho,Y., Nagai,K. and
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Homo sapiens cDNA FLJ35359 fis,
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Homo sapiens (human)
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2 (bases 1 to 1584)
Isogai, T. and Yamamoto, J.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                         LSKLPKTFMTKLRQKNGKREKRPWSL
298 c 331 g 429
                                                                           EWSKELGLIKKFVTDSNAVVQLKGLEAÄLVYVENAHVAGKTTGEVVSGVVSKVENOPK
KAKELGIEICLMYIEIEKGGAVQEELLKGLUNKOPKIIVACIETLKKALSEFGSKII
LLKPIIKVLEKLFESREKAVRDEAKLIAVEIYRMIRDALRPPLONINSYOLKELEEEW
VKLPTSAPRPTRFLRSQQELEAKLEQQQSAGGDAEGGGDDGDEVPQIDAYELLEAVEI
                                                                                                                                                                                     translation="MGDDSEWLKLPVDQKCEHKLWKARLSGYEEALKIFQKIKDEKSP/
                                                                                                                                                                                                               protein_id="BAC03943.1"
/db_xref="GI:21751328"
                                                                                                                                                                                                                                                                                          note="unnamed protein product"
                                                                                                                                                                                                                                                                                                                                                  /clone_lib="SALGL1"
/note="cloning vector: pME18SFL3"
                                                                                                                                                                                                                                                                                                                                                                           tissue_type="salivary gland"
|clone_lib="SALGL1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                               'mol_type="mRNA"
'db_xref="taxon:9606"
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Alignment Scores:

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                                                                       Query Match:
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Sabatini, L.M. and Azen, B.A.
Histatins, a family of salivary histidine-rich proteins,
encoded by at least two loci (HIS1 and HIS2)
encoded by at Res. Commun. 160 (2), 495-502 (1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                   Original
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                                                                                                                                                                                                       FYGDYGSNYLYDN"
                                                                                                                                                                                                                 /protein_id="AAA58645.1"
/db_xref="GI:292144"
/translation="MKFFVFALVLALMISMISADSHEKRHHGYRRKFHEKHHSHREFP
                                                                                                                                                                                                                                                                                          /gene="HIS1"
10. .183
                                                                                                                                                                                 gene="HIS1"
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/product="histatin 1"
                                                                                                                                                                                                                                                                            gene="HIS1"
                                                                                                                                                                                                                                                                                                                           tissue_type="parotid gland"
                                                                                                                                                                                                                                                                                                                                                    organism="Homo sapiens"
mol_type="mRNA"
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Clone distribution: MGC clone distribution information can be foun through the I.M.A.G.E. Consortium/LLML at: http://image.llnl.gov Series: IRAL Plate: 36 Row: a Column: 21
This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 4504528.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       cDNA Library Preparation: CLONTECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Sequencing Group at Stanford Human Center, Stanford University School of Medicine, Stanford, Web site: http://www-shgc.stanford.edu Contact: (Dickson, Mark) mcd@paxil.stanford.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Direct Submission
Submitted (03-DEC-2001) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: cgapbs-r@mail.nih.gov
Tissue Procurement: CLONTECH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NIH-MGC Project URL: http://mgc.nci.nih.Contact: MGC help desk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Strausberg, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Eukaryota; Metazoa;
Mammalia; Eutheria;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Homo sapiens (human)
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102 c
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/protein_id="AAH17835.1"
/db_xref="GI:17389615"
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/clone_lib="NIH_MGC_81"
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                                                                                                                                                                                                                         translation="MKFFVFALVLALMISMISADSHEKRHHGYRRKFHEKHHSHREFP
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Conservative:
Mismatches:
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MGC:22502 IMAGE:4289874, mRNA,
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PAT 27-AUG-2002

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Best Local Similarity:
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Pred. No.:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 (bases 1 to 357)
Jacobs, K., McCoy, J.M., Lavallie, E.R., Racie
Treacy, M., Spaulding, V. and Agostino, M.J.
Secreted expressed sequence tags (sESTs)
Patent: JP 2001519667-A 485 23-OCT-2001;
GENETICS INSTITUTE INC
OS Unidentified
PN JP 2001519667-A/485
PD 23-OCT-2001
PF 10-APR-1998 JP 1998543069
  142
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BD071675.1 GI:226172
JP 2001519667-A/485.
unidentified
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PI MAURICE TREACY, VIKKI SPAULDING, MICHAEL J AGOSTINO PC C12N15/12, C12N5/10, C07K14/47, C12Q1/68, A61K38/17 CC Strat Double;
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                                                  ATGAAGTTTTTTGTCTTTAGTCTTTAGTCTTTGGCTCTCATGATTTCCATGATTAGCGCTGAT
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10-APR-1997 US 08/838821
KENNETH JACOBS,JOHN M MCCOY,EDWARD R LAVALLIE,LISA A RACIE,
                                                                                                                                                                                                                                                                                                                                                                                  Topology: Linear;
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                                                                                                                                                                                                                                                                                                /organism='Unidentified'
Location/Qualifiers
                                                                                                                                                                                                                                               /organism="unidentified"
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74 c 65 g 11"
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99.00
66.67%
35.42%
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Location/Qualifiers
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Treacy, M., Spaulding, V. and Agostino, M.J.
Secreted expressed sequence tags (sESTs)
Patent: JP 2001519667-A 484 23-OCT-2001;
GENETICS INSTITUTE INC
OS Unidentified
PN JP 2001519667-A/484
PD 23-OCT-2001
PF 10-APR-1998 JP 1998543069
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67 ATGAAGTTCCTTGTCTTTGCCTTCATCTTGGCTCTCATGGTTTCCATGATTGGAGCTGAT
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M18372.1 GI:179465
histidine-rich protein.
                                      Human histidine-rich
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PI MAURICE TREACY, VIKKI SPAULDING, MICHAEL J AGOSTINO PC
C12N15/12, C12N5/10, C07K14/47, C12Q1/68, A61K38/17 CC Strai
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10-APR-1998 JP 1998543069
10-APR-1997 US 08/8388
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Key Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                          organism="unidentified"
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Strandedness:

RACIE,

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PRI 31-OCT-1994

TATEGE

144

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                                                                                                                                                                                                                                                                                                                                                                                    Unreported.
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Dickinson,D.P., Ridall,A.L. and Levine,M.J.
Human submandibular gland statherin and basic histidine-rich
peptide are encoded by highly abundant mRNA's derived from a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo
  Homo
           M26665.1 (histatin 2
                                                 Human histatin 2 (HIS2)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Original source text: Human female mRNA, clone pBRHSMSF1B8.1.
                                     M26665
                                                             HUMHIS2X
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             provided
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                   ArgGlyTyrPheGlnGlnTyr 41
                                                                                                                                                                               SerSerGluGluLysArgHis---ArgLysArgLysLysHis-------His
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                                                                                                                                                          TCACATGCAAAGAGACATCATGGGTATAAAAGAAAATTCCATGAAAAGCATCATTCACAT
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sapiens
 sapiens (human)
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by D.P.Dickinson 21-MAR-1988.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                             /gene="HRG"
/product="basic histidine-rich protein"
90 c 87 g 163 t
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
/mol_type="mRNA"
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                        GI:292145
                                                                                                                                                                                                                                                                                                                                                                                                                                           /note="basic histidine-rich
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /product="basic histidine-rich
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              translation="MKFFVFALILALMLSMTGADSHAKRHHGYKRKFHEKHHSHRGYR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       note="precursor"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /map="3q21-qter"
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TITLE
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Percent Similarity:
Best Local Similarity:
Query Match:
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                                                                                                                                                                                                                            Homo sapiens, complete cds. BC009791
Direct Submission
Submitted (02-JUL-2001) National Institutes of Health, Mammalian Submitted (02-JUL-2001) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                               Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Primates; 1 (bases 1 to 558)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sabatini,L.M. and Azen,E.A.
Histatins, a family of salivary histidine-rich proteins, encoded by at least two loci (HIS1 and HIS2)
Biochem. Biophys. Res. Commun. 160 (2), 495-502 (1989)
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                                                                                Strausberg, R.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /product="histatin 2"
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/mol_type="mRNA"
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codon_start=1
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IMAGE:4293405, mRNA,
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Best Local Similarity:
Query Match:
                REFERENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Clone distribution: MGC clone distribution information can be foun through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAL Plate: 19 Row: o Column: 1 This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 4557652.
                                                                                                                                                                                                                                                                                                                                                                               1 MetLysIlePheIlePheValPheIleMetAlaLeuIleLeuAlaMetIleArgAlaAsp 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    cDNA Library Preparation: CLONTECH Laboratories, Inc. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Institute for Systems Biology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Email: cgapbs-r@mail.nih.gov
Tissue Procurement: CLONTECH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
                                                                                                                         Sequence 22 from Patent W002083898. AX588147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Greene, Mark Ketteman and Anuradha Madan
                             Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    contact: amadan@systemsbiology.org
Anup Madan, Rachel Dickhoff, Jessica Fahey, Stephanie Ford, Julia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     http://www.systemsbiology.org
Bejanin,S.,
                                            Eukaryota;
                                                                          Homo sapiens (human)
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/db_xref="LocusID:3347"
/db_xref="taxon:9606"
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Tanaka, H.,
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                                               Craniata; Vertebrata; Euteleostomi;
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                                                                                                                                                                                                                                       Giordano, J.Y
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                      Human cdnas and proteins and uses thereof Patent: WO 02094864-A 5 28-NOV-2002;
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Pred. No. is the number of results predicted by chance to have a
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RESULT 1 ABX11394

ABX11394 standard; cDNA; 267 BP.

ALIGNMENTS

non-immune defence system; oral candidosis; gene therapy; microbial infection; fungal infection; dental caries; plaque; tartar; cystic fibrosis; systemic infection; Candida infection; mastitis;

Cow; ss; histatin; bovine; salivary secretion;

oral cavity;

Bovine mammary tissue cDNA clone.

ABX11394; 01-MAY-2003

(first entry)

Bos taurus

fungicide; antibacterial; mammary-gland

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SUMMARIES

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The invention discloses isolated histatin polynucleotides and
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                                                                      TyrGlnProTyrGlnArgTyrProLeuAsnTyrProProAlaTyrProPhePro
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                                            TACCAGCCATATCAACGATATCCACTAAATTATCCTCCTGCGTATCCATTTCCT 217
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consistions rich and specific to the salivary secretions. They are believed to function as part of the non-immune defence system, particularly in the coral cavity and have promise as therapeutic agents in humans with oral candidosis. Also disclosed are compositions comprising the histatin complyshed or polynucleotide, and at least one component consisting of physiological or pharmaceutical carriers or immunostimulants. The chistatin polynucleotide, polypeptide, or the comment consistion of comprising the polypeptide, is useful for treating (e.g. gene therapy) a disorder in a mammal, particularly microbial or fungal infections. The chistatin polynucleotide is also useful in genome mapping, physical companing or in the positional cloning of genes. Specifically, the collections of the oral cavity (e.g. dense. Specifically, the collections of the oral cavity (e.g. dental carries, plaque or tartar), companing, urethra, ear, skin, respiratory tract (e.g. cystic fibrosis caused by Pseudomonas aeruginosa), mucosa or eye, as well as for treating systemic infections such as systemic Candida infection. The polypeptide or polynucleotide is also useful for veterinary applications e.g. for treating mastitis. The sequence presented is a cDNA encoding a bovine histatin like polypeptide.
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29-OCT-1999;
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27-OCT-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; Page 11; 17pp; English
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Alignment Scores: Pred. No.:

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22-AUG-2000;
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The invention discloses isolated histatin polynucleotides and polypeptides, which comprise sequences expressed in bovine. Histatins are histidine rich and specific to the salivary secretions. They are believed to function as part of the non-immune defence system, particularly in the oral cavity and have promise as therapeutic agents in humans with oral
                                                                                           New histatin polynucleotides and polypeptides expressed in bovine tissues, useful for treating bacterial or fungal infections in mammals, e.g. infections of the oral cavity, vagina, urethra, ear or skin, or systemic infections
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29-OCT-1999;
22-AUG-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Cow; gene; ss; histatin; bovine; salivary secretion; oral cavity; non-immune defence system; oral candidosis; gene therapy; microbial infection; fungal infection; dental caries; plaque; tartar; cystic fibrosis; systemic infection; Candida infection; mastitis; fungicide; antibacterial.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               polypeptide or polynucleotide, and at least one component consisting of physiological or pharmaceutical carriers or immunostimulants. The histarin polynucleotide, polypeptide, or the commentic composition comprising the polypeptide, is useful for treating (e.g. gene therapy) disorder in a mammal, particularly migrobial or fungal infections. The
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27-OCT-2000; 2000US-0699146.

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RESULT 5
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Best Local Similarity:
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P-PSDB; ABG75792.
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Cow; gene; ss; histatin; bovine; salivary secretion; oral cavity;
                                         Bovine histatin like polypeptide, #6, cDNA.
                                                                                       01-MAY-2003
                                                                                                                                   ABX11393
                                                                                                                                                                              ABX11393 standard;
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US-10-079-754A-10 (1-58) x ABX11393 (1-525)

1 MetLygIlePheIlePheValPheIleMetAlaLeuIleLeuAlaMetIleArgAlaAsp

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cc polypeptides, which comprise sequences expressed in bovine. Histatins are cc histidine rich and specific to the salivary secretions. They are believed to function as part of the non-immune defence system, particularly in the coral cavity and have promise as therapeutic agents in humans with oral candidosis. Also disclosed are compositions comprising the histatin cc polypeptide or polynucleotide, and at least one component consisting of cc physiological or pharmaceutical carriers or immunostimulants. The cc histatin polypucleotide, is useful for treating (e.g. gene therapy) a disorder in a mammal, particularly microbial or fungal infections. The chistatin polynucleotide is also useful for treating fungal or bacterial cc polypeptide or polynucleotide is useful for treating fungal or bacterial conjupeptide or polynucleotide is useful for treating fungal or bacterial cc infections of the oral cavity (e.g. dental caries, plaque or tartar), cc vagina, urethra, ear, skin, respiratory tract (e.g. cystic fibrosis caused by Pseudomonas aeruginosa), mucosa or eye, as well as for treating cc systemic infections such as systemic Candida infection. The polypeptide cor polynucleotide is also useful for veterinary applications e.g. for treating mastitis. The sequence presented is a cDNA encoding a bovine cc instatin like polypeptide.
                                                                                                                                Query Match:
                                  Best Local Similarity:
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                                                                                                Alignment Scores:
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                                                                                                                                Sequence 525
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27-OCT-2000;
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2000US-0699146.
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82.61%
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               Conservative: Mismatches: Indels:
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RESULT 6
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The invention discloses isolated histatin polynucleotides and polypeptides, which comprise sequences expressed in bovine. Histatins are histidine rich and specific to the salivary secretions. They are believed to function as part of the non-immune defence system, particularly in the oral cavity and have promise as therapeutic agents in humans with oral candidosis. Also disclosed are compositions comprising the histatin polypeptide or polynucleotide, and at least one component consisting of physiological or pharmaceutical carriers or immunostimulants. The histatin polynucleotide, polypeptide, or the cosmetic composition comprising the polypeptide, is useful for treating (e.g. gene therapy) a disorder in a mammal, particularly microbial or fungal infections. The
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23-AUG-1999;
29-OCT-1999;
22-AUG-2000;
27-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                    New histatin polynucleotides and polypeptides expressed in bovine tissues, useful for treating bacterial or fungal infections in mammals, e.g. infections of the oral cavity, vagina, urethra, ear or skin, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cow; gene; ss; histatin; bovine; salivary secretion; oral non-immune defence system; oral candidosis; gene therapy; microbial infection; fungal infection; dental carries; plact cystic fibrosis; systemic infection; Candida infection; materials; systemic infection; candida infection; 
                                                                                                                                                                                                                                                                                                                                            Claim 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Glenn M,
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DB; ABG75793.
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                                                                                                                                                                                                                                                                                                                                         Page 12; 17pp;
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; 2000US-0699146.
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RESULT 7
ABX11392
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XX ABX1
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Pred. No.:
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Best Local Similarity:
23-AUG-1999;
29-OCT-1999;
22-AUG-2000;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cow; gene; ss; histatin; bovine; salivary secretion; oral cavity; non-immune defence system; oral candidosis; gene therapy; microbial infection; fungal infection; dental caries; plaque; tartar; cystic fibrosis; systemic infection; Candida infection; mastitis;
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99US-162701P.
2000US-0644190.
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Best Local Similarity:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The invention discloses isolated histatin polynucleotides and copyreptides, which comprise sequences expressed in bovine. Histatins are chistidine rich and specific to the salivary secretions. They are believed to function as part of the non-immune defence system, particularly in the caral cavity and have promise as therapeutic agents in humans with oral caralidosis. Also disclosed are compositions comprising the histatin copyreptide or polynucleotide, and at least one composition tonsisting of physiological or pharmaceutical carriers or immunostimulants. The composition polynucleotide, polypeptide, or the cosmetic composition composition composition composition and the polypeptide, is useful for treating (e.g. gene therapy) a disorder in a mammal, particularly microbial or fungal infections. The chistatin polynucleotide is also useful for treating fungal or bacterial caping or in the positional cloning of genes. Specifically, the copypeptide or polynucleotide is useful for treating fungal or bacterial composition or the oral cavity (e.g. dental cares, plaque or tartar), corrections of the oral cavity (e.g. dental cares, plaque or tartar), corrections of the oral cavity (e.g. dental cares, plaque or tartar), corrections of the oral cavity (e.g. dental cares, plaque or tartar), corrections of the oral cavity (e.g. dental cares, plaque or tartar), corrections of the oral cavity (e.g. dental cares, plaque or treating caused by Pseudomonas aeruginosa), mucosa or eye, as well as for treating systemic infections. The polypeptide or polynucleotide is also useful for veterinary applications e.g. for creating mastitis. The sequence presented is a cDNA encoding a bovine histatin like polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   New histatin polynuclectides and polypeptides expressed in bovine tissues, useful for treating bacterial or fungal infections in mammals, e.g. infections of the oral cavity, vagina, urethra, ear or skin, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 WPI;
                                                                                          Lysine-rich statherin protein; LRSP; acidic phosphoprotein; human precipitation inhibitor; autoimmune; inflammatory disorder; AIDS; asthma; allergy; diabetes mellitus; fungal; bacterial infection; cancer; leukemia; adenocarcinoma; melanoma; ds.
                                                                                                                                                                                                                                06-OCT-2000
                                                                                                                                                                                           Human statherin DNA.
                                                                                                                                                                                                                                                                                                       AAA48964 standard; DNA; 552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 96 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 1; Page 12; 17pp; English.
                                                         Homo sapiens
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DB; ABG75795.
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Location/Qualifiers 73..261
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RESULT 9
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                                                                                    AAV89526;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Disclosure; Page
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                             EST clone CP294
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P-PSDB; AAY94527.
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                                                                                                                                                                                                                                                     SerSerGluGluLysArgHisArgLysArgLysLysHisHisArgGlyTyrPheGlnGln
                                                                                                              standard;
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                                                                                                                                                                                                                            TCATCTGAAGAGAATTTTTGCGTAGAATTGGAAGATTCGGTTATGGGTAT---GGCCCT 189
                                                                                                                                                                                                                                                                                   ATGAAGTTCCTTGTCTTTGCCTTCATCTTGGCTCTCATGGTTTCCATGATTGGAGCTGAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             useful for diagnosis of the above disorders.
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Human; secreted protein; expressed sequence tag; EST; haematopolesis;

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RESULT 10
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EST clone CP289
                          15-FEB-1999
                                                     AAV89525
                                                                              AAV89525
                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 357
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, Spaulding
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                                                                                                                                                                                                              SerSerGluGluLysArgHisArgLysArgLysLysHisHisArgGlyTyrPheGlnGln
                                                                                                                                    CATCATTCACATCGAGAATTTCCA
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                          (first entry)
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Treacy M;
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standard; DNA; 491

06-OCT-2000 AAA48965; AAA48965

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Racie LA,
                                                                                                                                                                                                                                                                                                                Sequence
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                    TyrGlnProTyrGlnArgTyrProLeuAsnTyrProProAlaTyrProPhePro
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, Spaulding V,
                                                        TCATCTGAAGAG
                                                                              SerSerGluGluLysArgHisArgLysArgLysLysHisHisArgGlyTyrPheGlnGln
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                                                                                                                                                        US-10-079-754A-10 (1-58) x AAA48965
                                                                                                                                                                                                                                                                                     The present invention relates to human lysine-rich statherin protein (LRSP) (AAY94526). The cDNA sequence encoding this protein was identified through analysis of a cDNA library of breast tumour tissue (BRSTNOT14). The LRSP sequence was found to have homology with human statherin protein (AAY94527) and human basic histidine-rich protein (the present sequence). Human statherin is a phosphotein that acts as an inhibitor of precipitation of calcium phosphate salts in the oral cavity. The LRSP polypeptide and its antagonists may be useful for treating or preventing disorders associated with the activity of LRSP. Such disorders include autoimmune/inflammatory disorders (for example AIDS, allergies, asthma, diabetes mellitus), bacterial and fungal infection and cancers (such as leukemia, adenocarcinoma, melanoma). Antibodies to LRSP may be useful
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           precipitation inhibitor; autoimmune; inflammatory disorder; AIDS asthma; allergy; diabetes mellitus; fungal; bacterial infection; cancer; leukemia; adenocarcinoma; melanoma; ds.
                                                                                                                                                                                                                                                                                     Sequence 491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Purified polypeptide used for treating or preventing a disorder characterized by expression or activity of lysine-rich statherin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   23-OCT-1998;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Disclosure;
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                                                                                                                                                                                                                                                                                                                diagnosis of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2000-350699/30.
DB; AAY94528.
  158
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                                                                                                   CGAGGCTATAGATCAAATTAT 178
                    ArgGlyTyrPheGlnGlnTyr 41
                                                   TCACATGCAAAGAGACATCATGGGTATAAAAGAAAATTCCATGAAAAAGCATCATTCACAT 157
                                                                        SerSerGluGluLysArgHis---ArgLysArgLysHis----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Corley NC,
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                                                                                                                                                                                                                                                                                      B₽;
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38..193
/*tag= a
/product= Basic_histidine-rich_protein
                                                                                                                                                                                                                                                                                     151 A; 90
                                                                                                                                                                                                                                                                                                                the above disorders.
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                                                                                                                                                        (1-491)
                                                                                                                                                                                                                                                                                     G; 163
                                                                                                                                                                                                        Matches:
Conservative:
Mismatches:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The present invention provides the protein and coding sequences of novel proteins from a variety of organisms, including human, dog, cat, horse, cow, pig, hamster, monkey, macaque, yeast, bacteria, fruit fly, sea urchin and tomato. These were derived from expressed sequence tags (ESTs) from the organism of interest. They can be used in diagnostics, forensics, gene mapping, identification of mutations, to assess biodiversity and for nutritional purposes. The present sequence is a cDN/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 857 BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Isolated polypeptide for treatment antibodies and research use -
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P-PSDB; AAM23999.
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17-JUL-2000; 2000US-0617746.
03-AUG-2000; 2000US-0631451.
15-SEP-2000; 2000US-0663870.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  diagnostics; forensic test; gene mapping; genetic disorder;
biodiversity; gene therapy; nutrition; es.
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Drmanac 1
ArgGlyTyrPheGlnGlnTyr
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                                                                        TCACATGCAAAGAGACATCATGGGTATAAAAGAAAATTCCATGAAAAGCATCATTCACAT
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A, Zhang
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Werhman T;
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                                                                                                           US-10-079-754A-10 (1-58) x ACC51062
                                                                                                                                                                           Pred. No.:
                                                                                                                                                                                                                  The present invention relates to novel human GENSET coding sequences (ACC51060-ACC51115) and proteins (ABR48453-ABR48508). The GENSET sequences are useful for preparing a composition for treating GENSET-related disorders. They can also be used as markers for tissues in which the corresponding protein is preferentially expressed, as molecular weight markers on Southern gels, as chromosome markers or tags to identify chromosomes, and as reagents in assays to quantitatively determined levels of GENSET expression in biological samples.
                                                                                                                                                                                                     Sequence 438
                                                                                                                                                                                                                                                                                                       Claim 1; Page 404-405; 505pp; English
                                                                                                                                                                                                                                                                                                                           biological samples
                                                                                                                                                                                                                                                                                                                                 New GENSET polynucleotides and polypeptides, useful for preparing composition for treating GENSET-related disorders and as reagents assays to quantitatively determined levels of GENSET expression in
                                                                                                                                                                                                                                                                                                                                                                        P-PSDB;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACC51062;
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                                                                                                                                                                                                                                                                                                                                                                                                                     (GEST )
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                TyrGlnProTyrGlnArgTyrProLeuAsnTyrProProAlaTyr
                                   TCACATGAAAAGAGACATCATGGGTATAGAAGAAAATTCCAT--
                                                 SerSerGluGluLysArgHisArgLysArgLysLysHisHisArgGlyTyrPheGlnGln
                                                                       ATGAAGTTTTTTGTCTTTAGTCTTTAGTCTTTAGTCTTGGCTCTCATGATTTCCATGATTAGCGCTGAT
                                                                                        MetLysIlePheIlePheValPheIleMetAlaLeuIleLeuAlaMetIleArgAlaAsp
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                                                                                                                                   Percent Similarity:
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Query Match:
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Pred. No.:
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The present invention relates to novel GENSET polynucleotides (ABE75404-ABE76368). The (ABE76404-ABE76368). The polynucleotides and polypeptides are used in screening and diagnostic assays for abnormal GENSET expression and/or biological activity. They are also useful for screening of compounds for treating or preventing GENSET-related disorders, such as heavy metal toxicity, cancer,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Cytostatic; antiinflammatory; nootropic; neuroprotective; cardiant; gastrointestinal; gene therapy; GENSET; heavy metal toxicity; cance
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        inflammatory diseases, immune disorders, and the neuromuscular, central nervous system (CNS), cardiovascular or gastrointestinal effects of the toxicity. The polynucleotides are useful for constructing or expanding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 12; Page 295; 735pp;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               New GENSET polynucleotides and polypeptides, useful for treating heavy metal toxicity, cancer, inflammatory diseases, immune disorders, and the neuromuscular, CNS, cardiovascular or gastrointestinal effects of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ABZ36425 standard; cDNA; 438 BP.
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central nervous system; cardiovascular; gastrointestinal;
                                                                                       144 TCACATGAAAAGAGACATCATGGGTATAGAAGAAAATTCCAT
                                                                                                                                                                          SerSerGluGluLysArgHisArgLysArgLysHisHisArgGlyTyrPheGlnGln 40
---GAMAAGCATCATTCATACCATATCACACTACTACCACTTTTT
                                         TyrGlnProTyrGlnArgTyrProLeuAsnTyrProProAlaTyr
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New GENSET polynucleotides and polypeptides, useful for treating heavy metal toxicity, cancer, inflammatory diseases, immune disorders, and the neuromuscular, CNS, cardiovascular or gastrointestinal effects of the toxicity -
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Search completed: December 13, 2003, 03:17:53
Job time : 206 secs

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Database :
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-Q-/G9D2 1/USPTO, Spool/USI0079754/runat 12122003 145753 13039/app query.fasta_1.199
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-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS-human40.cdi
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-USER=US10079754 @CGN 1 1 56 @runat 12122003 145753 13039 -NCPU-6 -ICPU=3
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1: /cgn2_6/ptodata/;

2: /cgn2_6/ptodata/;

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/cgn2 6/ptodata/1/ina/5B_COMB.seq:*
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/cgn2 6/ptodata/1/ina/6B_COMB.seq:*
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Sequence 11325, A Sequence 13302, A Sequence 81, Appl Sequence 19, Appl Sequence 1, Appli Sequence 1, Appli Sequence 11899, Ap Sequence 11899, Ap Sequence 3, Appli Sequence 3, Appli Sequence 5, Appli Sequence 3, Appli Sequence 3, Appli Sequence 3, Appli Sequence 3, Appli Sequence 12, Appli Sequence 6, Appli Sequence 24, Appli Sequence 24, Appli	Sequence 1, Appli Sequence 1, Appli Sequence 7, Appli Sequence 7, Appli Sequence 5, Appli Sequence 5, Appli Sequence 5, Appli Sequence 5, Appli Sequence 6, Appli Sequence 6, Appli Sequence 6, Appli Sequence 5, Appli

ALIGNMENTS

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Percent Similarity:
Best Local Similarity:
Query Match:
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US-10-079-754A-10 (1-58) x US-09-370-838-66 (1-2581)
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SEQ ID NO 66
LENGTH: 2581
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Patent No. 64***...
Patent INFORMATION:
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CURRENT FILING DATE: 1999-08-09
EARLIER APPLICATION NUMBER: US 09/285,323
                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Reed, Steven G.
APPLICANT: Lodes, Michael J.
APPLICANT: Mohamath, Roadoh
APPLICANT: Secrist, Heather
TITLE OF INVENTION: COMPOUNDS FOR THERAPY AND DIAGNOSIS
TITLE OF INVENTION: LUNG CANCER AND METHODS FOR THEIR US
                                                                                                                                                                                                                                                                                              NUMBER OF SEQ
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                                                                                                                                                                                                                                                                                                                                                                                       FILE REFERENCE: 210121.475C1
                                                                                                                                                                                                                     TYPE: DNA
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; OTHER INFORMATION: "n" bases at various positions throughout the sequence
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                                        APPLICANT: FRASER, Claire M.
APPLICANT: VENTER, John C.
TITLE OF INVENTION: DNA SEQUENCES FOR STRAIN
TITLE OF INVENTION: TUBERCULOSIS
FILE REFERENCE: 24366-2007.00
CURRENT APPLICATION NUMBER: US/09/103,840A
CURRENT FILING DATE: 1998-06-24
NUMBER OF SEQ ID NOS: 2
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: FLEISCHMAN, Robert D.
APPLICANT: WHITE, Owen R.
APPLICANT: FRASER, Claire M.
APPLICANT: VENTER, John C.
                                                                                                                                                                                                                                      Sequence 1, Application US/09103840A Patent No. 6294328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sequence 2, Application US/09103840A Patent No. 6294328
                               SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: FRASER, Claire M.
APPLICANT: VENTER, John C.
TITLE OF INVENTION: DNA SEQUENCES FOR STRAITITLE OF INVENTION: TUBERCULOSIS
FILE REFERENCE: 24366-20007.00
CURRENT APPLICATION NUMBER: US/09/103,840A
CURRENT FILING DATE: 1998-06-24
NUMBER OF SEQ ID NOS: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: PatentIn Ver. 2.1
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LENGTH: 4.
TYPE: DNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
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US-09-387-574-9
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SOFTWARE: Microsoft O
SEQ ID NO 9
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                               PhePro
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; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1
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APPLICANT: Caboon, Rebecca E.

APPLICANT: Kinney, Tony

APPLICANT: Righlski, Antoni

TITLE OF INVENTION: Plant Geranylgeranyl Transferases

FILE REFERENCE: BB-1239

CURRENT APPLICATION NUMBER: US/09/387,574

CURRENT FILING DATE: 1999-08-31

EARLIER APPLICATION NUMBER: 60/098,743

EARLIER FILING DATE: September 1, 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 9, Application US/09387574 Patent No. 6168951
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Oryza sativa
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-----GlnGlnTyrGlnProTyrGlnArgTyrProLeuAsnTyrProProAlaTyrPro 56
                                                                               CGGCACCGGCCTCCCGGAGTCCGTCCTCGCCGCCGCCTGCCGCCGCCGGGAAGACGGT
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RESULT 5 US-09-668-096-9

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RESULT 6
US-08-592-214A-17
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; LENGTH: 2335;
; TYPE: DIA
; ORGANISN: OTYZA BATIVA
US-09-668-096-9
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APPLICANT: Rafalski, Antoni
APPLICANT: Rafalski, Antoni
TITLE OF INVENTION: Plant Geranylgeranyl Transferases
FILE REFERENCE: BB1239 US NA DIV
CURRENT APPLICATION NUMBER: US/09668,096
CURRENT FILING DATE: 2000-09-22
PRIOR APPLICATION NUMBER: 60/099,743
PRIOR FILING DATE: 1998-09-01
PRIOR FILING DATE: 1998-09-01
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PRIOR FILING DATE: 1999-08-31
NUMBER OF SEQ ID NOS: 12
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                                                    STREET: SIN Diego
CITY: San Diego
TATE: California
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                            NUMBER OF SEQUENCES: 3: CORRESPONDENCE ADDRESS:
                                                                                                                                                                            APPLICANT: Yanofsky, Martin F.
TITLE OF INVENTION: Cauliflower Floral Meristem Identify
TITLE OF INVENTION: Genes and Methods of Using Same
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                                                      COUNTRY: United States
                                                                                                                             ADDRESSEE:
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4370 La Jolla Village Drive,
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                                                                                                                                                                                    Sequence 17, Application US/09149976 Patent No. 6127123 GENERAL INFORMATION:
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                                                                                                                           APPLICANT: Yanofsky, Martin F.
TITLE OF INVENTION: Cauliflower Floral Meristem Identity
TITLE OF INVENTION: Genes and Methods of Using Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Campbell, Cathryn A.
REGISTRATION NUMBER: 31,815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Patentin Release #1.0, CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/592,21
                                                                        ADDRESSEE: Campbell
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NAME/KEY:
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TELECOMMUNICATION INFORMATION:
                                                                                                            NUMBER OF SEQUENCES:
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OTHER INFORMATION: /note= "N = OTHER INFORMATION: nucleotides.
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OTHER INFORMATION: /not OTHER INFORMATION: tha
               CITY: San Diego
STATE: California
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STRANDEDNESS: double
                                                         STREET:
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                                                       E: Campbell & Flores LLP
4370 La Jolla Village Drive, Suite 700
United States
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thaliana AP1 gene"
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COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PatentIn Release #1.0

MEDIUM TYPE: Floppy

Floppy disk

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Best Local Similarity:
Query Match:
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                                                                                                                                                  RESULT 8
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GENERAL INFORMATION:
APPLICANT: FLEISCHAAN, Robert D.
APPLICANT: WHITE, Owen R.
APPLICANT: WHITE, Owen M.
APPLICANT: TRASER, Claire M.
APPLICANT: VENTER, John C.
                                                                       Sequence 2, Application US/09103840A Patent No. 6294328 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 08/592
FILING DATE: 26-JAN-1996
ATTORNEY/AGENT INFORMATION:
NAME: Campbell, Cathryn A.
REGISTRATION NUMBER: 31,815
REFERENCE/DOCKET NUMBER: P-UI
TELECHMOUNICATION INFORMATION:
TELEPHONE: (619) 535-9001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (619) 535-8949
INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/149,976
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PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: unsure
LOCATION 2095.2098
OTHER INFORMATION: /note= "N = one or
OTHER INFORMATION: nucleotides."
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STRANDEDNESS: doub
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ENGTH: 4379 base pairs
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                                                                                                                                                                                   1646 CCA 1648
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                                                                                                                                                                                                                                                                                         GlyTyrPheGlnGlnTyrGlnProTyrGlnArgTyrProLeuAsnTyrProProAlaTyr
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Matches:
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18 ArgAlaAspSerSerGluGluLysArgHisArgLysArgLysLysHisHisArgGlyTyr 37

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Percent Similarity:
Best Local Similarity:
Query Match:
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                                                                                                                                                                                    ; ORGANISM: Mycobacterium tuberculosis
; OTHER INFORMATION: H37Rv
US-09-103-840A-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-079-754A-10 (1-58) x US-09-103-840A-2 (1-4403765)
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US-10-079-754A-10 (1-58) x US-09-103-840A-1 (1-4411529)
                                                                                                                                                                                                                                                                                  SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: ELEISCHMAN, Robert D.
APPLICANT: WHITE, Owen R.
APPLICANT: FRASER, Claire M.
APPLICANT: VENTER, John C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application US/09103840A Patent No. 6294328
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CURRENT APPLICATION NUMBER: US/99/103,840A
CURRENT FILING DATE: 1998-06-24
NUMBER OF SEQ ID NOS: 2
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: DNA SEQUENCES FOR STRA:
TITLE OF INVENTION: TUBERCULOSIS
FILE REFERENCE: 24366-2007.00
CURRENT APPLICATION NUMBER: US/09/103,840A
CURRENT FILING DATE: 1998-06-24
NUMBER OF SEQ ID NOS: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: DNA SEQUENCES TITLE OF INVENTION: TUBERCULOSIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OTHER INFORMATION: CDC 1551
OTHER INFORMATION: "n" bases
OTHER INFORMATION: represent
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                                                                                                                                                                                                                                                  LENGTH: 4411529
TYPE: DNA
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RESULT 10
US-09-328-352-3819/c
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Best Local Similarity:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-079-754A-10 (1-58) x US-09-328-352-3819 (1-426)
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APPLICANT: GATY L. BREEON et al.
APPLICANT: GATY L. BREEON et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO
TITLE OF INVENTION: BAUMANNII FOR DIAGNOSTICS AND THERAPEUTICS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 3819
LENGTH: 426
TYPE: DNA
ORGANISM: Acinetobacter baumannii
   SEQ ID NO 30
LENGTH: 750
TYPE: DNA
ORGANISM: Arabidopsis thaliana
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                                                                                                                                                                                                                                                                                             GENERAL INFORMATION: APPLICANT: Kumagai
                                                                                                                                                                                                                                                                                                                                  Patent No.
                                                                          CURRENT APPLICATION NUMBER: US/09/359,301A
CURRENT FILING DATE: 1999-07-21
NUMBER OF SEQ ID NOS: 42
SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                 APPLICANT: Erwin, Robert L.

APPLICANT: McGee, David R.

TITLE OF INVENTION: METHOD OF DETERMINING THE PRESENCE OF A

TITLE OF INVENTION: TRAIT IN A PLANT BY TRANSFECTING A NUCLEIC ACID SEQUENCE OF

TITLE OF INVENTION: A DONOR PLANT INTO A DIFFERENT HOST PLANT IN AN ANTI-SENSE

TITLE OF INVENTION: ORIENTATION

FILE REFERENCE: 008010137US04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILE REFERENCE: GTC99-03PA
CURRENT APPLICATION NUMBER: US/09/328,352
CURRENT FILING DATE: 1999-06-04
NUMBER OF SEQ ID NOS: 8252
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o. 6426185
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Erwin, Robert L.
McGee, David R.
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Indels:
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Best Local Similarity:
Query Match:
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US-08-308-883-1
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                                                                                                                                                                                                                                              TELEPHONE: (614) 624-3774
TELEFAX: (614) 624-3074
TELEX: NO. 5576300e
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 857 base pairs
TYPE: Nucleic acid
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                                                                                                                                                         TOPOLOGY: Linear
MOLECULE TYPE: cDNA
DESCRIPTION: Human milk kappa-casein
HYPOTHETICAL: No
                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER: Apple MacIntosh System 7.1 SOFTWARE: ClarisWorks 1.0 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/8/308,883
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COMPUTER READABLE FORM:
MEDIUM TYPE: 3.5 inch,
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ADDRESSEE: Lonnie R. Drayer
ADDRESSEE: ROSS Products Division
                                                                                                            FRAGMENT TYPE:
ORIGINAL SOURCE:
                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA: NO. 5
TELECOMMUNICATION INFORMATION:
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TITLE OF INVENTION: Method for Inhibition of Human Rotavirus Infection.
                                                                                                                                               ANTI-SENSE:
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                                                                        ORGANISM: Homo STRAIN:
HAPLOTYPE: Mammary gland
                                   DEVELOPMENTAL STAGE: Adult
                                                         INDIVIDUAL ISOLATE:
                                                                                                                                                                                                                                       STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STATE:
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625 Cleveland Avenue
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Best Local Similarity:
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                                                                                                                                                                                                                                                                                                Sequence 1, Application US/08730163 Patent No. 5712250
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                                                                                                                                                NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
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COMPUTER READABLE FORM
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LOCATION:
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RELEVANT RESIDUES IN SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IDENTIFICATION METHOD: OTHER INFORMATION: Th
                                              STATE: Ohio
                                                            STREET: 625 Cle
CITY: Columbus
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                          COUNTRY:
                                                                                               ADDRESSEE:
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                                                                                                                                DDRESSEE:
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                                                                              E: Lonnie R. Drayer
E: ROSS Products Division
E: Abbott Laboratories
625 Cleveland Avenue
                                                                                                                                                                                                 Prieto, P. A.
Seo, A. E.-Y.
Baxter, J. H.
Cummings, R.D.
                                                                                                                                                                                 Cummings, R.D.
VENTION: Product for Inhibition of Human Rotavirus Infection.
                             United States
                                                                                                                                                                                                                                                                   Mukerji,
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25-JAN-1993
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Matches:
Conservative:
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Indels:
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ATGAAGAGTTTTCTTCTAGTTGTCAATGCCCTGGCATTAACCCTGCCTTTTTTGGCTGTG 104

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Query Match:
                                         US-10-079-754A-10 (1-58) x US-08-730-163-1 (1-857)
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                                                                                                                Percent Similarity:
                                                                                                                                                                                       US-08-730-163-1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE CHARACTERISTICS:
LENGTH: 857 base pairs
TYPE: Nucleic acid
STRANDEDNESS: Single
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OPERATING SYSTEM: MacI:
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US
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CHROMOSOME/SEGMENT:
MAP POSITION:
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IMMEDIATE SOURCE:
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ORIGINAL SOURCE:
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                                                                                                                                                                                                   , DOCUMENT NUMBER: 1
FILING DATE: 25-JJ
PUBLICATION DATE:
RELEVANT RESIDUES 1
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VOLUME:
                                                                                                                                                                                                                                                                                                                                                                           LOCATION: 45...593
IDENTIFICATION METHOD:
OTHER INFORMATION: The
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FILING DATE: 16-SEP-1994
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MetLysIlePheIlePheValPhe---IleMetAlaLeuIleLeuAlaMetIleArgAla 19
                                                                                                                                                                                                                                                                                                                                 DNA Encoding Kappa-Casein,
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(614) 624-3074
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Matches:
Conservative:
Mismatches:
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RESULT 14
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Patent No.
                                                                                                                                                                                                                                                                                                                                                                                      TELEPHONE: 202-628-519
TELEFAX: 202-737-3528
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 857 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: DK 88/
FILING DATE: 23-JAN-1992
ATTORNEY/AGENT INFORMATION:
NAME: COOPER, IVER P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                          REGISTRATION NUMBER: 28,005
REFERENCE/DOCKET NUMBER: HAI
TELECOMMUNICATION INFORMATION:
TELEPHONE: 202-628-5197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
ADDRESSEE: BROWDY AND NEIMARK
STREET: 419 Seventh Street, N.W., Suite 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: DNA ENCODING KAPPA-CASEIN, PROCESS FOR TITLE OF INVENTION: OBTAINING THE PROTEIN AND USE THEREOF NUMBER OF SEQUENCES: 26
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                                    FEATURE:
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LOCATION:
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LOCATION:
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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                                                                                                          LOCATION:
                                                                                                                          NAME/KEY:
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                                                                                                                                                                                                                                                                                                                                                                      TYPE: nucleic acid
                                                      LOCATION:
                                                                         NAME/KEY:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      INFORMATION:
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BERGSTROEM, Sven
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13..44
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45..593
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                                                                                             TELEX: 248633
INFORMATION FOR SEQ ID NO: J
SEQUENCE CHARACTERISTICS:
LENGTH: 857 base pairs
TYPE: nucleic acid
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                sequence 1, Application US/08462437 Patent No. 6232094
                                                                                                                                                                                                                                                                                         MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OBERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0, Ver
RAPELICATION NUMBER: US/08/462,437
FILLING DATE: 05-JUN-1995
PRIOR APPLICATION NUMBER: DK 88/92
APPLICATION NUMBER: DK 88/92
APPLICATION NUMBER: 23-JAN-1992
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY: USA
ZIP: 20004
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy d.
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                HYPOTHETICAL: 1
ORIGINAL SOURCE
                                                 MOLECULE TYPE:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TUMBER OF SEQUENCES:
                                                                                                                                                                           TELEPHONE: 202-0-
TELEPHONE: 202-737-3528
                                                                                                                                                                                                                                             NAME: COOPER, IVER P. REGISTRATION NUMBER: 28,005 REFERENCE/DOCKET NUMBER: HA
                                                                       TOPOLOGY: 1:
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ORGANISM: Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             105 GAGGTTCAAAACCAGAAACAACCAGCATGCATGAGAATGATGAAAGACCATTCTATCAG
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419 Seventh Street, N.W.,
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Matches:
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FEATURE:
NAME/KEY:
LOCATION:
LOCAT
Search completed: December 13, 2003, 04:44:10 Job time : 1240 secs
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Pred. No.:
                                                                                                                                          105 GAGGITCAAAACCAGAAACAACCAGCAIGCCAIGAGAAIGAIGAAAGACCAITTCIAICAG 164
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Matches:
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OM protein - nucleic search, using frame_plus_p2n model

Copyright

GenCore version (c) 1993 - 2003

5.1.6 Compugen Ltd.

Run on:

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Result
No.
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Maximum DB seq length: 2000000000
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-Q-/cgn2 1/USPTO spool/USI0079754/runat 12122003 145753 13072/app query.fasta_1.199
-DB=Published Applications NA -QFMT=fastap -SUPFIX=xrpb-MINATCH=0.1
-LOOPEL=0 -LOOPEXT=0 -UNITS-bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MXX=100
-THR MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXLEN=200000000 -USER=US10079754 @CGN 1 352 @runat 12122003 145753 13072
-NCPU=6 -LOPU=3 -NO MMAP -LARGSUGREY -NGE SCORES=0 -MAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
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Perfect score:
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        Score
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Match Length DB
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Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
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/ Cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
/ Cgn2_6/ptodata/2/pubpna/USO6_NEW_PUB.seq:*
/ Cgn2_6/ptodata/2/pubpna/USO6_PUBCOMB.seq:*
/ Cgn2_6/ptodata/2/pubpna/USO6_PUBCOMB.seq:*
/ Cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
/ Cgn2_6/ptodata/2/pubpna/USO8_NEW_PUB.seq:*
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/ Cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
/ Cgn2_6/ptodata/2/pubpna/USO9E_PUBCOMB.seq:*
/ Cgn2_6/ptodata/2/pubpna/USO9E_PUBCOMB.seq:*
/ Cgn2_6/ptodata/2/pubpna/USO9E_PUBCOMB.seq:*
/ Cgn2_6/ptodata/2/pubpna/USO9 NEW_PUB.seq:*
/ Cgn2_6/ptodata/2/pubpna/USO9NE_PUBCOMB.seq:*
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Sequence 1, Appl Sequence 60, Appl Sequence 58, Appl Sequence 49, Appl Sequence 1949, Ap Sequence 11010, A Sequence 32, Appl	sequence 1, Appli sequence 2, Appli sequence 3, Appli sequence 5, Appli sequence 6032, Ap sequence 7032, Ap sequence 7032, Ap sequence 2016, Ap sequence 313, App sequence 66, Appli sequence 66, Appli sequence 67, Appli sequence 68, Appl sequence 61, Appl sequence 116142, sequence 116142, sequence 116142, sequence 116142, sequence 245, Appl sequence 247, Appl	equence 15, App

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ALIGNMENTS

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RESULT 1
US-10-079-754A-15
                       PRIOR APPLICATION NUMBER: US 09/699,146
PRIOR FILLING DATE: 2000-10-27
PRIOR PELICATION NUMBER: US 60,162,701
PRIOR PILLING DATE: 1999-10-29
PRIOR PILLING DATE: 1999-10-29
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR FILLING DATE: 2000-08-22
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR FILLING DATE: 1999-08-23
NUMBER OF SEQ ID NOS: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 15, Application US/10079754A
Publication No. US20020164625A1
GENERAL INFORMATION:
APPLICANT: Glenn, Matthew
APPLICANT: Molenaar, Adrian J.
APPLICANT: Davis, Stephen R.
APPLICANT: Davis, Stephen R.
                                                                                                                                                                                                                                                                                                                     APPLICANT: Molenaar, Adrian J.
APPLICANT: Davis, Stephen R.
TITLE OF INVENTION: Compositions Isolated from Bovine
TITLE OF INVENTION: Mammary Gland and Methods for Their Use
FILE REFERENCE: 11000.1068
CURRENT EPPLICATION NUMBER: US/10/079,754A
CURRENT FILING DATE: 2002-02-19
FastSEQ for Windows Version 4.0
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SEQ ID

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Sequence 200, Application US/10079623 .

Publication No. US20020169302Al

GENERAL INFORMATION:
APPLICANT: Havukkala, Ilkka J.
APPLICANT: Gienn, Matthew
APPLICANT: Grigor, Murray R.
APPLICANT: Molenaar, Adrian J.
ITTLE OF INVENTION: Compositions isolated from bovine
ITTLE OF INVENTION: mammary gland and methods for their use.
FILE REFERENCE: 11000.1044C3
CURRENT APPLICATION NUMBER: US/10/079,623
CURRENT APPLICATION NUMBER: US/10/079,623
CURRENT FILING DATE: 2002-02-19
NUMBER OF SEQ ID NOS: 370
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 200
LENGTH: 2667
TYPE: DNA
ORGANISM: Bovine
US-10-079-623-200
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TYPE: DNA
ORGANISM: Bovine
US-10-079-754A-15
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Best Local Similarity:
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RESULT 3
                                                                                                                                                                                                                 US-10-079-754A-10 (1-58) x US-10-079-623-200 (1-267)
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TH: 267
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                                              TyrGlnProTyrGlnArgTyrProLeuAsnTyrProProAlaTyrProPhePro 58
                                                                                                          SerSerGluGluLysArgHisArgLysArgLysLysHisHisArgGlyTyrPheGlnGln 40
                                                                                                                                                      ATGAAGATCTTTATCTTTGTCTTCATTATGGCTCTCATCCTAGCCATGATTAGAGCTGAT 103
                                                                                                                                                                      MetLysIlePheIlePheValPheIleMetAlaLeuIleLeuAlaMetIleArgAlaAsp 20
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Matches:
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Mismatches:
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Matches:
Conservative:
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Sequence 1, Application US/10079754A
Publication No. US20020164625A1
GENERAL INFORMATION:
APPLICANT: Glenn, Matthew
APPLICANT: Grigor, Murray R.
APPLICANT: Molenaar, Adrian J.
APPLICANT: Davis, Stephen R.
TITLE OF INVENTION: Compositions Isolated from Boy
TITLE OF INVENTION: Mammary Gland and Methods for
GENERAL INFORMATION:

APPLICANT: Glenn, Matthew
APPLICANT: Grigor, Murray R.
APPLICANT: Grigor, Murray R.
APPLICANT: Molenaar, Adrian J.
APPLICANT: Molenaar, Adrian J.
APPLICANT: Molenaar, Stephen R.
TITLE OF INVENTION: Compositions Isolated from Bov
ITILE OF INVENTION: Mammary Gland and Methods for
FILE REFERENCE: 11000.1068
CURRENT APPLICATION NUMBER: US/10/079,754A
CURRENT FILING DATE: 2002-02-19
PRIOR APPLICATION NUMBER: US 09/699,146
PRIOR FILING DATE: 2000-10-27
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR APPLICATION NUMBER: US 60,150,330
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CURRENT FILING DATE: 2002-02-19
PRIOR APPLICATION NUMBER: US 09/699,146
PRIOR FILING DATE: 2000-10-27
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR APPLICATION NUMBER: US 99/644,190
PRIOR FILING DATE: 1999-10-29
PRIOR FILING DATE: 2000-08-22
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR FILING DATE: 1999-08-23
NUMBER OF SEQ ID NOS: 15
SOFTWARE: FBSESEQ for Windows Version 4.0
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LENGTH: 505
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Matches:
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Mismatches:
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Best Local Similarity:
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; TYPE: DNA
; ORGANISM: Bovine
US-10-079-754A-4
                                                                 US-10-079-754A-10 (1-58) x US-10-079-754A-2 (1-585)
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                                                                                                                                                       Percent Similarity:
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                                                                                                                                                                                                                                                                                                                                                                                  FILE REFERENCE: 11000.10688

CURRENT APPLICATION NUMBER: US/10/079,754A

CURRENT FILING DATE: 2002-02-19

PRIOR APPLICATION NUMBER: US 09/699,146

PRIOR FILING DATE: 2000-10-27

PRIOR APPLICATION NUMBER: US 60,162,701

PRIOR FILING DATE: 1999-10-29

PRIOR APPLICATION NUMBER: US 09/644,190

PRIOR APPLICATION NUMBER: US 09/644,190

PRIOR APPLICATION NUMBER: US 60,150,330
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SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 4
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                                                                                                                                                                                                                                                                                                                SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Grigor, Murray R.
APPLICANT: Molenaar, Adrian J.
APPLICANT: Davis, Stephen R.
TITLE OF INVENTION: Compositions Isolated from
TITLE OF INVENTION: Mammary Gland and Methods
EILP DEFENCE. 11000 1066
                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 15
SOFTWARE: FastSEQ for Windows Version 4.0
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                                                                                                                                                                                                                                                           LENGTH: 585
TYPE: DNA
ORGANISM: Bovine
 149
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208
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APPLICANT: Grigor, Murray R.
APPLICANT: Molenaar, Adrian J.
APPLICANT: Molenaar, Adrian J.
APPLICANT: Davis, Stephen R.
TITLE OF INVENTION: Compositions Isolated from Bovine
TITLE OF INVENTION: Compositions Isolated from Bovine
TITLE OF INVENTION: Mammary Gland and Methods for Their Use
FILE REFERENCE: 11000.1068
CURRENT APPLICATION NUMBER: US/10/079,754A
CURRENT FILING DATE: 2000-00-2-19
PRIOR APPLICATION NUMBER: US 09/699,146
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR APPLICATION NUMBER: US 99/644,190
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR APPLICATION NUMBER: US 09/643,190
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR FILING DATE: 1999-08-23
PRIOR FILING DATE: 1999-08-23
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                                                               Sequence 3, Application US/10079754A Publication No. US20020164625A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 15
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: Glenn, Matthew
APPLICANT: Grigor, Murra;
APPLICANT: Molenaar, Adr.
APPLICANT: Davis, Stephe
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APPLICANT: Glenn, Matthew APPLICANT: Grigor, Murray R. APPLICANT: Molenaar, Adrian J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Bovine
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                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGAAGATCTTTATCTTTGTCTTCATTATGGCTCTCATCCTAGCCATGATTAGAGCTGAT 102
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277.00
82.61%
82.61%
87.66%
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APPLICANT: Moleman, Adrian J.

APPLICANT: Davis, Stephen R.

APPLICANT: Davis, Stephen R.

TITLE OF INVENTION: Compositions Isolated from Bovine
TITLE OF INVENTION: Mammary Gland and Methods for Their
FILE REFERENCE: 11000.1068
CURRENT APPLICATION NUMBER: US/10/079,754A
CURRENT FILING DATE: 2002-02-19
PRIOR APPLICATION NUMBER: US 09/699,146
PRIOR FILING DATE: 2000-10-27
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR APPLICATION NUMBER: US 60,163,330
PRIOR FILING DATE: 1999-10-29
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR FILING DATE: 1999-08-23
PRIOR FILING DATE: 1999-08-23
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US-10-079-754A-5
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Best Local Similarity:
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APPLICANT: Glenn, Matthew
APPLICANT: Grigor, Murray
APPLICANT: Molenaar, Adri
APPLICANT: Davis, Stepher
SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 5, Application US/10079754A Publication No. US20020164625A1
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PRIOR FILING DATE: 1999-10-29
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR EILING DATE: 2000-08-22
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR FILING DATE: 1999-08-23
                NUMBER OF SEQ ID NOS: 15
SOFTWARE: FastSEQ for Windows Version 4.0
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CURRENT FILING DATE: 2002-02-19
PRIOR APPLICATION NUMBER: US 09/699,146
PRIOR FILING DATE: 2000-10-27
PRIOR FILING DATE: 2000-10-27
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
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ORGANISM: Bovine
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                  Query Match:
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RESULT 9
US-09-992-600A-5
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PRIOR APPLICATION NUMBER: US 09/924,340
PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: PCT/IB01/01715
PRIOR FILING DATE: 2001-08-06
PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR FILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/298,698
PRIOR APPLICATION NUMBER: US 60/298,574
PRIOR APPLICATION NUMBER: US 60/293,574
PRIOR FILING DATE: 2001-05-25
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                                                                                              Pred. No.:
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APPLICANT: Benjanin, Stephane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: JPatent
SEQ ID NO 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 5, Application US/09992600A Publication No. US20030027161A1
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CURRENT FILING DATE: 2001-11-13
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TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
                                                                                                                                                                                                                             NAME/KEY: polyA_signal LOCATION: 397..402
                                                                                                                                                                                                                                                                                    NAME/KEY: 3'UTR
LOCATION: 318..438
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LOCATION: 423..438
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LOCATION: 84..317
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NAME/KEY: 5'UTR
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Best Local Similarity:
Query Match:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR FILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: US 60/302,277
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CURRENT APPLICATION NUMBER: US/09/924,340
CURRENT FILING DATE: 2001-08-06
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: JPatent
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo sapiens
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APPLICATION NUMBER: US 60/298,698
FILING DATE: 2001-06-15
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1..83
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                                          TyrGlnProTyrGlnArgTyrProLeuAsnTyrProProAlaTyr 55
                                                                                TCACATGAAAAGAGACATCATGGGTATAGAAGAAAATTCCAT---
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423..438
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         ---GAAAAGCATCATACCATATCACACTACTACCACTTTTT 227
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Indels:
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RESULT 12
US-10-154-678-5
; Sequence 5, Application US/10154678
; Publication No. US20030162186A1
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Query Match:
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SEQ ID NO 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: US 60/293,574 PRIOR FILING DATE: 2001-05-25
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PRIOR FILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR FILING DATE: 2001-06-29
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PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: PCT/IB01/01715
PRIOR FILING DATE: 2001-08-06
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CURRENT APPLICATION NUMBER: US/09/992,095B
CURRENT FILING DATE: 2003-02-20
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APPLICANT: Tanaka, Hiroaki
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LOCATION: 423..438
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LOCATION: 1..83
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ORGANISM: Homo sapiens
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LOCATION: 397..402
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LOCATION: 318..438
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JOCATION: 84..317
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Matches:
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GENERAL INFORMATION:

Stephane

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APPLICANT: TENDAKA, HIVOAKI
FILLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 182.US1.REG
CURRENT APPLICATION NUMBER: US/10/154,678
CURRENT FILING DATE: 2002-10-15
PRIOR APPLICATION NUMBER: US 09/924,340
PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR FILING DATE: 2001-06-15
PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR FILING DATE: 2001-06-15
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR FILING DATE: 2001-06-15
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Sequence 5, Application US/09999570
Publication No. US20030170628A1
GENERAL INFORMATION:
APPLICANT: Benjanin, Stephane
APPLICANT: Tanaka, Hiroaki
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: G-091US08DIV
CURRENT APPLICATION NUMBER: US/09/999,570
CURRENT FILING DATE: 2001-06-14
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SEQ ID NO 5
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PRIOR FILING DATE: 2001-05-25
NUMBER OF SEQ ID NOS: 112
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LOCATION: 423..438
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LOCATION: 318..438
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TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
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LOCATION: 84..317
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SEQ ID NO 5
                                                           CURRENT APPLICATION NUMBER: US/10/001,142
CURRENT FILING DATE: 2001-11-14
PRIOR APPLICATION NUMBER: US 09/924,340
PRIOR FILING DATE: 2001-08-06
                                                                                                                                            APPLICANT: Benjanin, Stephane
APPLICANT: Tanaka, Hiroaki
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS
FILE REFERENCE: 91.US7.DIV
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PRIOR APPLICATION NUMBER: US 60/293,574
PRIOR FILING DATE: 2001-05-25
PRIOR APPLICATION NUMBER: PCT/IB01/01715
PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US 60/305,456
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LOCATION: 423..438
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LOCATION: 397..402
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LOCATION: 1..83
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LOCATION: 318..438
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FILING DATE: 2001-06-29
APPLICATION NUMBER: US 60/298,698
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FILING DATE: 2001-08-06
APPLICATION NUMBER: US 60/305,456
FILING DATE: 2001-07-13
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PRIOR FILING DATE: 2001-07-13
NUMBER OF SEQ ID NOS: 112
SOFTWARE: JPatent
SEQ ID NO 5

TYPE: DNA ORGANISM: Homo sapiens

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             ; NUMBER OF SEQ ID NOS: 112
SOFTWARE: JPATENT
; SEQ ID NO 5
: LENGTH: 438
TYPE: DNA
ORGANISM: Homo mapiens
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                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: PCT/IB01/01715
PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR FILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR FILING DATE: 2001-06-29
                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Benjanin, Stephane
APPLICANT: Tanaka, Hiroaki
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.US6.DIV
CURRENT APPLICATION NUMBER: US/10/000,489
CURRENT FILING DATE: 2001-11-14
                                                                                                                                                                                                                                                                                                                                CURRENT FILING DATE: 2001-11-14
PRIOR APPLICATION NUMBER: US 09/924,340
PRIOR FILING DATE: 2001-08-06
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PRIOR FILING DATE: 2001-05-25
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NAME/KEY: 5'UTR
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NAME/KEY: polyA signal
LOCATION: 397..402
NAME/KEY: polyA site
LOCATION: 423..438
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NAME/KEY: 3'UTR
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186 ---GAAAAGCATCATTCATACCATATCACACTACTACCACTTTTT 227
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                             41 TyrGlnProTyrGlnArgTyrProLeuAsnTyrProProAlaTyr 55
                                                                                21 SerSerGluGluLysArgHisArgLysArgLysLysHisHisArgGlyTyrPheGlnGln 40
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Matches:
Conservative:
Mismatches:
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Search completed: December 13, 2003, 04:28:38 Job time : 249 secs

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Listing first 45 summaries
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Total number of hits satisfying chosen parameters:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No. is the number of results predicted by chance to have score greater than or equal to the score of the result being predicted by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score
     seq length: 0 seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             110
102
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1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*
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Match Length DB
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316
1 MKIFIFVFIMALILAMIRAD......QQYQPYQRYPLNYPPAYPFP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      283308 seqs, 96168682 residues
     GenCore version 5.1.6
Copyright (c) 1993 - 2003 Compugen
     Gapext 0.5
   SBHUP
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4	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30
5	58	58	58.5	58.5	58.5	58.5	58.5	59	59	59	59.5	60	60	60	60
18.4	18.4	18.4	18.5	18.5	18.5	18.5	18.5	18.7	18.7	18.7	18.8	19.0	19.0	19.0	19.0
433	156	113	2142	2139	1872	1870	413	894	473	409	1464	1076	1074	662	269
N	N	N	N	N	N	N	N	N	N	N	N	N	Ŋ	N	N
B47041	S77873	866936	B35098	S46404	836152	S37671	T04520	F84870	A54691	A43256	S58984	T24887	T24877	T23757	T42919
hypothetical prote	probable phosphate	probable membrane	MHC class III hist	vitellogenin - yel	MHC class III hist	MHC class III hist	hypothetical prote	hypothetical prote	octamer-binding pr	mobilization prote	development protei	hypothetical prote	hypothetical prote	hypothetical prote	protein tio - atel

ALIGNMENTS

RESULT 1

	SBHUP
	statherin precursor [validated] - human
	C:Date: 24-ADT-1984 #sequence revision 30-Jun-1993 #text change 08-Dec-2000
	C;Accession: JH0153; A27308; B27469; A03288; A32524
	R;Sabatini, L.M.; He, Y.Z.; Azen, B.A. Gene 89, 245-251, 1990
	A; Title: Structure and sequence determination of the gene encoding human salivary stathe
	A;Accession: JMN0153
	A; Molecule type: DNA
	A;Cross_references; GB:M31077
0	R;Sabatini, L.M.; Carlock, L.R.; Johnson, G.W.; Azen, E.A.
printed,	
	A; Title: cDNA cioning and chromosomal localization (4911-13) of a gene for statherin, a
	A;Kererence number: A2/308; MUID:880/4310; PMID:3502/20 A:Accession: A27308
. •	A; MOLECULE LYDE: MRNA
	A;Residues: 1-62 <sab></sab>
ion	A;Cross-references: GB:M32639; NID:g338504; PIDN:AAA60593.1; PID:g338506
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	R;Dickinson, D.P.; Ridall, A.L.; Levine, M.J.
1 precurso	BIOCHEM. BIOPRYS. Kes. Commun. 149, 784-790, 1987
3 precurs	A;itte: numen submenorbular grand stacherin and basic nistranne-rich peptiae are encode A:Reference number: A27488, MITD-88106506. DMTD-3276601
n precurso	A; Accession: B27489
phorin Sp2	A; Molecule type: mRNA
phorin Sp2	A;Residues: 1-62 <dic></dic>
ical prote	A;Cross-references: GB:M18371; NID:g338610; PIDN:AAA60600.1; PID:g338611
1 - Stump-	K;SCD1691nger, D.H.; Hay, D.I. I BAO Chem OSO 1600-1605 1027
precurso	A:Title: Complete covalent attricture of statherin. a tyrosine-rich acidic neptide which
ical prote	A;Reference number: A03288, MUID:77118656; PMID:838735
ical prote	A; Accession: A03288
transfer	A; Molecule type: protein .
ical prote	A;Residues: 20-62 <sch></sch>
rage prote	R;Oppenheim, F.G.; Hay, D.I.; Smith, D.J.; Offner, G.D.; Troxler, R.F.
hordein C	A; Title: Molecular basis of salivary proline-rich protein and peptide synthesis: cell-fr
ical prote	gnal peptides.
874.2 (imp	A;Reterence number: A92773; MUID:87309161; PMID:3476566
Car prote	A.Mologilo timo. Associa
icai proce 31 - barle	A:Modecule type: protein A:Residues: 1.'X'.34.'X'.6.'X'.8.'X'.10.'X'.12-13.'XX'.16 <opp></opp>
ical prote	A, Note: radiosequencing of precursor after cell-free translation
appa precu	C;Comment: Statherin is one of the salivary proteins that stabilize saliva supersaturate
Cinage (EC	C.Genetica precursors of enamer perfice). These imminitors thus promote enamer scapitiza
arial shea	A JOHNES TATH
ein precur	A;Cross-references: GDB:120391; OMIM:184470
lle missin	A; Map position: 4q11-4q13

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A;Cross-references: GB.M26664; NID:g292143; PIDN:AAA58645.1; PID:g292144 R;vanderSpek, J.C.; Wyandt, H.E.; Skare, J.C.; Milunsky, A.; Oppenheim, F.G.; Am. J. Hum. Genet. 45, 381-387, 1999 A;Title: Localization of the genes for histatins to human chromosome 4q13 and A;Reference number: A32987; MUID:89371745; PMID:2773933 A;Accession: A32987
                                                                                                                                                                                 A;Molecule type: protein
A;Residues: 20-57 <SUG>
R;Oppenheim, F.G.; Xu, T.; McMillian, F.M.; Levitz, S.M.; Diam
J. Biol. Chem. 263, 7472-7477, 1988
A;Title: Histatins, a novel family of histidine-rich proteins
A;Reference number: A94685; MUID:88227937; PMID:3286634
                                                                                                                                                                                                                                                                                                                                                                         A;Molecule type: protein
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A;Residues: 20-57 <OPP>
R;Sugiyama, K.; Ogino, T.; Ogata, K.
R;Sugiyama, K.; Ogino, T.; 1990
Arch. Oral Biol. 35, 415-419, 1990
A;Title: Rapid purification and characterization of histatins (histidine-rich polypeptic A;Reference number: A60664, MUID:90321151; PMID:2372245
A;Recession: A60664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Molecule type: mRNA
A;Residues: 14-57 <VAN>
R;Oppenheim, F.G.; Yang, Y.C.; Diamond, R.D.; Hyslop, D.; Offne
R;Oppenheim, F.G.; Yang, 1182, 1986
J. Biol. Chem. 261, 1177-1182, 1986
J. Title: The primary structure and functional characterization
A;Reference number: A25661; MUID:86111755; PMID:3944083
A;Accession: A25661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A;Cross-references: GB:L04132; NID:g184051; PIDN:AAA02745.1; PID:g184054 R;Sabatini, L.M.; Azen, E.A.
Biochem. Biophys. Res. Commun. 160, 495-502, 1989
A;Title: Histatins, a family of salivary histidine-rich proteins, are en A;Reference number: A90156; MUID:89246491; PMID:2719677
A;Accession: A32541.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R;Sabatini, L.M.; Ota, T.; Azen, E.A.

Mol. Biol. Evol. 10, 497-511, 1993
A;Title: Nucleotide sequence analysis of the human salivary protein genes HIS1
A;Reference number: 157425; MUID:93330039; PMID:8336540
A;Accession: 157425
A;Residues: 20-57 <OP2>
R;TTOXler, R.F.; Offner, G.D.; Xu,
J. Dent. Res. 69, 2-6, 1990
A;Title: Structural relationship by
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Species: Homo sapiens (man)
C;Date: 31-Dec-1993 #sequence_revision 31-Dec-1993 #text_change 08-Dec-2000
C;Accession: I57425; A32541; A32987; A25661; A60664; A28164; A60742; A60659
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              N;Alternate names: his
N;Contains: histatin 2
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                                                                                                                           A; Molecule type:
                                                                                                                                                              A; Accession: A28164
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A; Residues: 1-57 < SAB>
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A; Residues: 1-57 <SA1>
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         between human salivary histatins
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Pred. No. 7.5e-06;
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                                                               T.; Vanderspek, J.C.; Oppenheim,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
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R;Dickinson, D.P.; Ridall, A.L.; Levine, M.J.
Biochem. Biophys. Res. Commun. 149, 784-790, 1987
A;Title: Human submandibular gland statherin and basic histidine-rich peptide are
A;Reference number: A27489; MUID:88106506; PMID:3426601
A;Accession: A27489
                                                                                                 A;Residues: 1-51 <VAN>
R;Sugiyama, K.; Ogino, T.; Ogata, Arch. Oral Biol. 35, 415-419, 1999
A;Title: Rapid purification and cl
                                                                                                                                                                                                                                                                                    A;Cross-references: GB:M18372; NID:g179465; PIDN:AAA51830.1; PID:g179466 R;vanderSpek, J.C.; Offner, G.D.; Troxler, R.F.; Oppenheim, F.G. Arch. Oral Biol. 35, 137-143, 1990 A;Title: Molecular cloning of human submandibular histatins. A;Reference number: A60659; MUID:90262442; PMID:2344289 A;Accession: B60659
                                                                           Arch. Oral Biol. 35, 415-419, 1990
A;Title: Rapid purification and characterization of histatins A;Reference number: A60664; MUID:90321151; PMID:2372245
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Biochem. Biophys. Res. Commun. 160, 495-502, 1989
Biochem. Biophys. Res. Commun. 160, 495-502, 1989
A;Title: Histatins, a family of salivary histidine-rich
A;Reference number: A90156; MUID:89246491; PMID:2719677
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C;Date: 31-Dec-1993 #sequence revision 31-Dec-1993 #text change 08-Dec-2000
C;Accession: B32541; A27499; B80659; B60664; C60664; B28164; C28164; B60742;
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F;31-57/Product: histatin 2 #status experimental <MA2>
F;21/Binding site: phosphate (Ser) (covalent) #status experimental
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A;Title: Molecular cloning of human submandibular histatins A;Reference number: A60659; MUID:90262442; PMID:2344289
A;Accession: A60659
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A; Residues: 1-51 < DIC>
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A; Introns: 17/3; 24/3; 34/3
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A; Residues: 'VML', 14-57 < VA2>
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A; Molecule type: protein A; Residues: 20-43 < SUG>
                                                                                                                                                                                                                             A; Molecule type: mRNA
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                                                         A; Accession: B60664
                                                                                                                                                                                                                                                            A; Status: not compared with conceptual translation
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20; Conserv
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Pred. No. 5.7e-05;
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A; Molecule type: protein A; Residues: 20-51 / cmm
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R; Oppenheim, F.G.; Xu, T.;
J. Biol. Chem. 263, 7472-7
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A;Introns: 17/3; 24/3; 34/3
C;Superfamily: histatin precursor; statherin/histatin signal sequence homology
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A;Accession: A61000
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A;Title: Purification and characterization from human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 R;Sabatini, L.M.; Ota, T.; Azen, E.A.
Mol. Biol. Evol. 10, 497-511, 1993
A;Title: Nucleotide sequence analysis of the human salivary protein
A;Paference number: 157425; MUID:93330039; PMID:8336540
A;Accession: 177213
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A;Residues: 24-31 <TR7>
R;Xu, L.; Fischer, T.; Pollock, J.J.
Pept. Res. 2, 373-375, 1989
A;Title: Sequence determination of low molecular weight salivary histidine-rich polypept
A;Reference number: A60675, MUID:92273931; PMID:2520776
A;Accession: A60675
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A;Residues: 1-51 <RES>
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R;Murakami,
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                                                                                                         ;1-25/Domain: statherin/histatin signal sequence homology <SHH>;1-19/Domain: signal sequence #status predicted <SIG>;20-51/Product histatin 3 #status experimental <MA3>;20-44/Product histatin 6 #status experimental <MA5>;20-44/Product histatin 1 #status experimental <MA5>;20-43/Product histatin 1 #status experimental <MA5>;20-43/Product histatin 12 #status experimental <M11>;24-31/Product histatin 12 #status experimental <M12>;31-51/Product histatin 12 #status experimental <MA9>;31-44/Product histatin 4 #status experimental <MA9>;31-44/Product histatin 7 #status experimental <MA7>;32-44/Product histatin 10 #status experimental <MA7
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;Title: Structural relationship between human salivary histatins.
;Reference number: A60742; MUID:90154430; PMID:2303595
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;Residues: 31-43 <TR3>
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        Query Match
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                                                                        10 #status experimental <
        30.1%;
    Score 95;
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    DB 1;
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Length 51;
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R;Oppenheim, F.G.; Offner, G.D.; Troxler, R.F. J. Biol. Chem. 257, 9271-9282, 1982
A;Title: Phosphoproteins in the parotid saliva of a proline-rich phosphopeptide.
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R;Oppenheim, F.G.; Hay, D.I
J. Dent. Res. 66, 462-466,
                                                                                           C; Superfamily:
                                                                                                                                                                                    A;Cross-references: GB:U39658; NID:g1079704; PIDN:AAC47422.1; A;Note: the authors translated the codon CAA for residue 149, C;Comment: This protein is a structural component that is mapp
                                                                                                                                                                                                                                                       A; Residues: 1-181 < FEN>
                                                                                                                                                                                                                                                                                                                               A, Title: Isolation and sequencing of the gene encoding A, Reference number: JC5233; MUID: 97128316; PMID: 8972909 A, Accession: JC5233
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C;Date: 13-Mar-1997 #sequence_revision
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C;Species: Tenebrio molitor (yellow mealworm)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      F;20-61/Product: statherin #status experimental <MAT>
F;21,22/Binding site: phosphate (Ser) (covalent) #status experimental
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  F;1-25/Domain: statherin/histatin signal sequence homology F;1-19/Domain: signal sequence #status experimental <SIG>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Molecule type: protein A; Residues: 20-61 < OP2>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A;Reference number: A03289; MUID:82265555; PMID:7107568 A;Accession: A03289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Note: 6-Leu was also found promnenheim, F.G.; Offner, G.D.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Molecule type: protein A; Residues: 1-19 < OP1>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Accession: B32524
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A;Title: Molecular basis of salivary proline-rich protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      statherin precursor - crab-eating macaque C:Species: Macaca fascicularis (crab-eating macaque)
                                                                                                                                        A;Gene: Sp23
                                                                                                                                                                                                                                                                             A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                      A; Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                C; Accession: JC5233
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Superfamily: statherin precursor; statherin/histatin signal sequence homology; Reywords: phosphoprotein; saliva
                                                                                                                    Introns:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches
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                                            Query Match
                                                                                                                                                                   Genetics:
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                                                                                                                                                                                                                                                                                                                                                                                                 179,
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                   госат
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9, 257-262, 1996
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. Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MKIFIFVFIMALILAMIRADSSEEKRHRKRKKHHRGYFQQYQPYQRYPLNYPPAY 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MKIFIFVFIMALILAMIRADSSEEKRH-RKRKKH-----HRGYFQQY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MXFLXFXLXLLXMXXMXXXDSSEEKFLRRLRRFDEGRYGPYQPFAPQPL-YPQPY 54
                                                                                         hydroxyproline-rich glycoprotein
                                                                                                                                                                                    protein is a structural component that is mapped to a layer within
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25.8%;
                   23.9%; Score 75.5; DB 2; 31.2%; Pred. No. 0.18;
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Pred. No. 0.01
7; Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                         13-Mar-1997 #text_change 21-Jul-2000
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                                            Length 181;
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                                                                                                                                                                                                             PID:g1079705
and CAG for residues 24,
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                                                                                                                                                                                                                                                                                                                                                                             structural protein
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A44157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       hypothetical protein R07B5.8 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R; Paesen, G.C.; Schwartz, M.B.; Peferoen, M.; Weyda, F.; Happ, G.M.
J. Biol. Chem. 267, 1882-18857, 1992
A;Title: Amino acid sequence of Sp23, a structural protein of the spermatophore A;Reference number: A44157; MUID:92406806; PMID:1527013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    C;Date: 10-Jun-1993 #sequence_revision 18-Nov-1994 #text_change 17-Mar-2000
C;Accession: A44157
                R;Schlesinger,
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A; Introns: 34/1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     submitted to the EMBL Data Library, A; Reference number: Z19829
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   Int. J.
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                            reatherin - stump-tailed macaque ;Species: Macaca arctoides (stump-tail;Date: 03-Aug-1992 #sequence_revision;Accession: JK0224
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Residues: 1-1271 <WIL>
Residues: 1-1271 <WIL>
Cross-references: EMBL:Z72512; PIDN:CAA96668.1; GSPDB:GN00023;
Cross-mantal source: clone R07B5
                                                                                                                                                                                                                                                                                                                                                                                                                      Gene: CESP:R07B5.8
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   Pept. Protein
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                                                                                                                                                                                                                                                                                                                                17;
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brio molitor (yellow mealworm)
                                                                                                                                                                                                                      57
                                                                                                                                                                                                                                                                                                                            22.8%; ilarity 27.4%; Conservative 1
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                                                    arctoides (stump-tailed macaque)
32 #sequence_revision 03-Aug-1992
D.I.; Levine,
. 34, 374-380,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              23.9%;
                                                                                                                                                                                                                                                                                                                            s; Score 72; DB
s; Pred. No. 2.7;
10; Mismatches
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2.7;
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                                                    #text_change 13-Sep-1996
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                                                                                                                                                                                                                                                                                          -----YPLN-----YPPAY
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 C-hordein C;Species:
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                                     T06211
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A;Introns: 19/3; 30/3
C;Superfamily: kappa-casei
C;Keywords: glycoprotein;
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A; Residues: 55, 'HT', 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Experimental source: mammary gland R;Bosze, Z.Z.; Devinoy, E.E.; Pulssant, submitted to the EMBL Data Library, Nove A;Description: Characterization of the A;Reference number: S31623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Title: Structure of the rabbit kappa-casein encoding A; Reference number: JC4955; MUID: 97017124; PMID: 8863725 A; Accession: JC4955
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Gene 174, 27-34,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        C;Species: Oryctolagus cuniculus (domestic rabbit)
C;Date: 31-Dec-1996 #sequence revision 31-Dec-1996
C;Accession: JC4955; S31623; S42802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 18; Conserv
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A;Molecule type: protein
A;Residues: 1-42 <SCH>
                                                                                                                                                                                                                                                                                                                       A; Residues: 55, 'HT', 58-165, 'R', 167
A; Cross-references: EMBL: X76910; NJ
                                                                                                                                                                                                                                                                                                                                                                                                                    submitted to the EMBL Data A; Reference number: S42802
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                                                                                                                                                                                                                                                                                 A;Gene: kappa-Cas
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            R; Dawson
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C;Species: Oryctolagus cuniculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     JC4955
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Accession:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Cross-references: GB: U44054
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Residues: 1-180 <BAR>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Status: preliminary
                                                                                                                                                                                                                                            Superfamily: kappa-casein
                                                                                                                                                    Matches
                                                                                                                                                                                      Query Match
                                                                                                                                                                        Local
                                                                                                                                                                                                                                                                19/3;
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                                                                                                               1 MKIFIFVF-IMALILAMIRADSSEEKRHRKRKKHHRGYFQQYQPY-----QRYPLNYP
                                                                                                                                                    20;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1-180 <BOS>
                                                                                                                                                                        Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S31623
                                     PAY 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DSSEEKRHRKRKKHHRGYFQQYQPYQRYPLNYPPAYPFP
                                                                         MKHFLLVVNILAVTLPFLAADIQNQEQTTCRENEERLFHQVTAPYIPVHYVMNRYP-QYE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DSSEEKFLRRLRRFDEG---RYGPYQ--PFVPPPLYPQP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Aszodi, A.; Devinoy, E.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1996
                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          22.3%;
                                                                                                                                                                      21.0%;
                                                                                                                                                                                                                              mammary gland; milk; phosphoprotein
                                                                                                                                                                                                                                                                                                                                                                                                                                        Library, December 1993
                                                                                                                                                                                                                                                                                                                         NID:g439523; PIDN:CAA54232.1; PID:g439524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 70.5; D
Pred. No. 0.18
4; Mismatches
                                                                                                                                                                      Score 66.5;
Pred. No. 1.
                                                                                                                                                                                                                                                                                                                                             <DAW>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 November 1992
                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 C.C.; Fontaine, M.M.L.; Houdebine,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Fontaine,
                                                                                                                                                                        .9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             kappa-casein
                                                                                                                                                                                          BB
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           #text_change 13-Aug-1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  34
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 42;
                                                                                                                                                                                        Length 180;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gene: Expression of the cloned
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CDNA :
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                                                                                                                                                    Gaps
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precursor - barle : Hordeum vulgare

barley

(barley)

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A;Molecule type: DNA
A;Residues: 1-733 <SAT>
A;Cross references: EMBL:AL391146
                                                                                                        A; Reference number: Z25394
A; Accession: T51434
                                                                                                                                                   R;Sato, S.; Nakamura, Y.; Kaneko, submitted to the Protein Sequence
                                                                                                                                                                                              C; Date: 18-Aug-2000
C; Accession: T51434
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             R; Volckaert, G.; Wood, V.; submitted to the EMBL Data A; Reference number: Z21865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A;Molecule type: protein
A;Residues: 21-48 <SHE>
C;Superfamily: gliadin
F;1-20/Domain: signal sequence #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Nature 286, 520-522, 1980
A;Reference number: A93228
A;Accession: A03355
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Title: Nucleotide sequence of the barley C-hordein gene A;Reference number: Z15537; MUID:93380629; PMID:8396543 A;Accession: T06211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Date: 30-Apr-1999 #sequence_revision 30-Apr-1999 #text_change 11-May-2000 C;Accession: T06211; A03355
                                                                                                                                                                                                                                      hypothetical protein F2G14 10 - Arabidopsis thaliana C;Species: Arabidopsis thaliana (mouse-ear cress)
                                                                                                                                                                                                                                                                                                                                                                       뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Residues: 1-386 < VOL>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hypothetical protein SPBC16E9.14c - fission yeast (Schizosaccharomyces pombe)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Genetika 29, 1070-1079, 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   A; Map position:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Cross-references: EMBL:Z99759; PIDN:CAB16906.1; A;Experimental source: strain 972h-; cosmid c16E9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Accession: T39588
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A;Cross-references: EMBL:S66938; NID:g442523; PIDN:AAB28161.1; PID:g442524
R;Shewry, P.R.; Autran, J.C.; Nimmo, C.C.; Lew, E.J.L.; Kasarda, D.D.
A;Experimental source: cultivar Columbia; BAC clone F2G14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Residues: 1-310 <SAI>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A;Status: preliminary; translated from GB/EMBL/DDBJ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ;21-310/Product: C-hordein #status experimental <MAT>
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                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gene: SPDB:SPBC16E9.14c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 03-Dec-1999
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                                                                                 preliminary
                                                                                                                                                                                                                                                                                                                                                                       41
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                                                                                                                                                                                                                                                                                                                                                                     SVDTRPTHRKGHHHKHSLSHQYFLPPKNRQPLEIPASYPIP 81
                                                                                                                                                                                                                                                                                                                                                                                                              SEEKRHRKKKKHHRGYFQQYQ----PYQRYPLNYPPAYPFP 58
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MKTFLTFVLLAMVMSIVTTARQLNPSSQELQSPQQSYLQ--QPYPQNP--YLPQQPFP
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                                                                                                                                                                                                             #sequence_revision 18-Aug-2000 #text_change 18-Aug-2000
                                                                                                                                                Sequence
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               36.6%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 66; DB Pred. No. 4.4; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 66;
Pred. No.
                                                                                                                                                   Database,
                                                                                                                                                                       T.; Kato,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
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                                                                                                                                                T.; Asamizu,
August 2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.6;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GSPDB:GN00067; SPDB:SPBC16E9.14c
                                                                                                                                                                                                                                                                                                                                                                                                                                                           18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 386
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                                                                                                                                                                       E.; Kotani, H.; Tabata,
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RESULT 14
T21275
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A;Authors: Ferreira, V.C.A.; Ferro, J.A.; Fraga, J.S.; Franca, S.C.; Franco, M.C.; Frohm J.D.; Junqueira, M.L.; Kemper, E.L.; Kitajima, J.P.; Krieger, J.E.; Kuramae, E.S.; Laigr chado, M.A.; Madeira, A.M.B.N.; Madeira, H.M.F.; Marino, C.L.; Marques, M.V.; Martins, E.M.F.; Matsukuma, A.Y.; Menck, C.F.M.; Miracca, E.C.; Miyaki, C.Y.; F.G.; Nunes, L.R.; Oliveira, M.A.; de Oliveira, M.C.; de Oliveira, R.C.; Palmieri, D.A!, Rodrigues, V.; Rosa, A.J. de M.; de Rosa Jr., V.E.; de Sa, R.G.; Santelli, R.V.; Sawasak, A, Authors: da Silva, A.C.R.; da Silva, F.R.; da Silva, J.M.; Silva Jr., W.A.; da Silvaira, M.; Tsuhako, M.H.; Vallada, H.; Van Sluys, M.A.; Verjovski-Almeida, S.; Vettore, A.L.; Z., A.R. as Silvaira, R.A.; Verjovski-Almeida, S.; Vettore, A.L.; Z., A.R. as Silvaira, R.A.; Silvaira, R.C.; Palmieri, D.A., Reference number: AS9328
                    C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision
C;Accession: T21275
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         R; anonymous, The Xyle
Nature 406, 151-157,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           conjugal transfer protein XFa0014 [imported] - Xylella fastidiosa (strain 9a5c
C;Species: Xylella fastidiosa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
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A;Introns: 44/1; 104/1; 161/1; 230/1; 260/3; 459/3; 499/3
A;Note: F2G14_10
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R; Matthews, P.
                                                                                                        hypothetical protein F22E12.1 - Caenorhabditis elegans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Note: plasmid pXF5.1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Genome: plasmid
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A;Residues: 1-447 <SIM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Gene: XFa0014
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Experimental source: strain 9a5c
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8; Mismatches
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submitted to the EMBL Data Library, A;Reference number: Z19399
A;Accession: T21275

April 1996

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seed storage protein - barley

C;Species: Hordeum vulgare (barley)

C;Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 20-Aug-1999

C;Accession: S18350

R;Entwistle, J.; Knudsen, S.; Mueller, M.; Cameron-Mills, V.

Plant Mol. Biol. 17, 1217-1231, 1991

A;Title: Amber codon suppression: the in vivo and in vitro analysis of two C-hordein gen
A;Reference number: S18350; MUID:92032786; PMID:1932695

A;Accession: S18350

A;Status: preliminary
A;Molecule type: DNA
A;Gross-references: EMBL:X60037; NID:g19000; PIDN:CAA42642.1; PID:g19001

C;Superfamily: g1iadin
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A;Molecule type: DNA
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A;Residues: 1-1203 < WIL>
A;Cross-references: EMBL:Z71180; PIDN:CAA94892.1; GSPDB:GN00023; CESP:F22E12.1
A;Experimental source: clone F22E12
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Search completed: December 13, 2003, 03:09:11 Job time : 26 secs
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A;Introns: 71/1; 156/3; 223/3; 339/1; 669/3; 736/1; 758/3; 854/3; 931/3; 968/3; 1181/3
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A;Gene: CESP;F22E12.1
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Local Similarity 25.9%; Pred. No. 4;
hes 15; Conservative 14; Mismatches 25; Indels
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     GenCore version 5.1.6 (c) 1993 - 2003 Compugen Ltd.
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87). EIN THAT NHIBITIN O MODULA	OF 1-16. PubMed=3476566; lay D.I., Smith D.J., of salivary proline- ree translations and and partial amino aci	8735; e of starium phos;	=2373369; Azen E.A.; determinati	01; evine theri mRNA	M N.A. 4310; bubMed=3502720; Carlock L., Johnson G., A g and chromosomal localizat regulator of calcium in sa Genet. 41:1048-1060(1987).	a; Craniat: s; Catarrh:	ted) sequence annotati	PRT;	ALIG	MGF1 HUMAN NR54 HUMAN S217 MOUSE GDA3 WHEAT MGA1 YEAST CLA4 CANAL FATH HUMAN SMR2 RAT TRSF DROSER TRSF DROSER CASK BUBBU TRSF DROME
56(1987). PROTEIN THAT STABILIZES SALIVA S BY INHIBITING THE PRECIPITATION T ALSO MODULATES HYDROXYAPATITE C	Offner G.D., rich protein processing of d sequence of	therin, a tyrosine phate precipitatio	on of the gene	.J.; and basic histid derived from a 4-790(1987).	zen E.; ion (4q11-13) liva.";	a; Vertebrata; E ini; Hominidae;	ce update) rion update)	62 AA.	ALIGNMENTS	L HUMAN 1 HUMAN 7 MOUSE WHEAT 1 YEAST 1 CANAL 1 HUMAN 2 DROER 7 DROSI 7 BUBBU 1 HUMAN
SUPERSATURATED N OF CALCIUM CRYSTAL	Troxler R.F.; and peptide f human and macaque their signal	n from human	encoding human	line-rich peptide common ancestral	of a gene for	<pre>Buteleostomi; Homo.</pre>				Q9hay2 homo sapien Q1523 homo sapien Q1523 homo sapien Q91yy5 mus musculu P04723 triticum ae P53050 saccharomyc O14427 candida alb Q14517 homo sapien P18897 rattus norv Q23935 drosophila Q24669 drosophila P11840 bubalus bub P11596 drosophila

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P15575;
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                                                                                                                                                                                                                                                      HUMAN
                                                                                      SEQUENCE FROM N.A. MEDLINE=89246491; PubMed=2719677;
                                                                                                                                           Eukaryota;
                                                                                                                                                    Homo sapiens (Human)
                                                                                                                                                                 HTN1 OR HIS1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Biomineralization;
   MEDLINE=93330039;
Chen Z.W.;
                      SEQUENCE
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GO:0030197; F:extracellular matrix constituent, lubricant.
GO:0046848; F:hydroxyapatite binding activity; NAS.
GO:0005515; F:protein binding activity; IPI.
GO:0030345; F:structural constituent of tooth enamel; NAS.
GO:0030502; P:negative regulation of bone mineralization; NG:0001503; P:ossification; TAS.
GO:0001503; P:ossification; TAS.
GO:0046541; P:saliva secretion; NAS.
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27; Conser
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1991 (Rel. 17,
2003 (Rel. 42,
n 1 precursor (
                                               L.M., Azen E.A.;
ns, a family of salivary histidine-rich proteins,
sast two loci (HIS1 and HIS2).";
160./205.502(1989)
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                      FROM N.A.
                                           Biophys.
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Eutheria;
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             PubMed=8336540
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Primates;
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(Histidine-rich protein
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                                           and HIS2).";
mun. 160:495-502(1989)
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Pred. No. 6.1e-06;
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PHOSPHORYLATION.
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RX MEDULANIAN Strausberg R.L., Feingold E.A., Wagner L., Shenmen C.M., Schuller R.A. Strausberg R.L., Feingold E.A., Wagner L., Shenmen C.M., Schuller R.A. Klausner R.D., Collins F.S., Wagner L., Shenefer C.F., Bhat N.K., RA Altechul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., RA Altechulo I., Marusina K., Farmer A.A., Rubin G.M., Hong L., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Scheetz T.E., Rah S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., RA Brownstein M.J., Utdin T.B., Toshiyuki S., Carninci P., Prange C., RA Brownstein M.J., WcEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H., Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., RA, Willalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Fahey J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A., Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., RA Blakesley R.M., Touchman J.W., Green E.D., Dickson M.C., RA Blakesley R.M., Touchman J.W., Green E.D., Dickson M.C., RA Blakesley R.M., Touchman J.W., Green E.D., Dickson M.C., RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smailus D.E., RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.; Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
    Offner G.D., Troxler R.F.; "Histatins, a novel family of histidine-rich proteins in "Barotid secretion. Isolation, characterization, primary s and fungistatic effects on Candida albicans."; J. Biol. Chem. 263:7472-7477(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE=Saliva; MEDLINE=9032115; PubMed=2372245; MEDLINE=9032115; PubMed=2372245; Sugiyama.K., Ogino T., Ogata K.; "Rapid purification and characterization "Rapid purification and characterization human whole saliva.";
                       This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its
                                                                                               "Localization of the genes for histatins to human chromosome 4q13 tissue distribution of the mRNAs.";
Am. J. Hum. Genet. 45:381-387(1989).

-i- FUNCTION; HISTATINS ARE SALIVARY PROTEINS THAT ARE CONSIDERED BE MAJOR PRECURSORS OF THE PROTECTIVE PROTEINACEOUS STRUCTURE TOOTH SURFACES (ENAMEL PELLICLE). IN ADDITION, HISTATINS EXHIB ANTIBACTERIAL AND ANTIFUNGAL ACTIVITIES.

-i- PTM: HISTATIN 2 IS A PROTECLYTIC PRODUCT OF HISTATIN 1.
                                                                                                                                                                                                                                                                                                                  SEQUENCE OF 14-57 FROM N.A. MEDLINE=89371745; PubMed=2773933; Vanderspek J.C., Wyandt H.E., Ska
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MEDLINE=86111755; PubMed=3944083;
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MEDLINE=88227937; PubMed=3286634;
Oppenheim F.G., Xu T., McMillian F.M.,
Offner G.D., Troxler R.F.;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Nucleotide sequence analysis of the human salivary protein genes HIS1 and HIS2, and evolution of the STATH/HIS gene family."; Mol. Biol. Evol. 10:497-511(1993).
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or send a
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Dickinson D.F., Ridall A.L., Levine M.J.;
"Human submandibular gland statherin and basic histidine-rich peptide"
"Human submandibular gland statherin and basic histidine-rich peptide"
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15-SEP-2003 (Rel. 42, Last annotation update)
Histatin 3 precursor (Histidine-rich protein
rich protein) [Contains: Histatins 4 to 12]
HTN3 OR HIS2.
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                                                          "Nucleotide sequence HIS1 and HIS2, and ev
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Vanderspek J.C., Offner G.D., Tro.
"Molecular cloning of human subman
"Molecular cloning of human subman
Arch. Oral Biol. 35:137-143(1990)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  "Histatins, a family of salivary histidine-rich by at least two loci (HIS1 and HIS2).";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=89246491; PubMed=2719677; Sabatini L.M., Azen E.A.;
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Mammalia; Eutheria;
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Genew; HGNC:5283; HTN1.
MIM; 142701; -.
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EMBL; L04132; AAA02745.1; -.
EMBL; BC017835; AAH17835.1; -.
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GO:0003797; F:antibacterial peptide activity; NAS.
GO:0006952; P:defense response; NAS.
mineralization; Fungicide; Antibiotic; Signal; Pho:
NAL 1 19
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PRES 21 21 PHOSPHORYLATION.
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FROM N.A.
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                                                                              analysis of the
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Commun. 160:495-502(1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           13;
                                                                                                                                                                                                              ., Troxler R.F., Oppenheim submandibular histatins.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 102; DB 1;
Pred. No. 4.4e-05;
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HISTATIN 2.
PHOSPHORYLATION.
F3532BD1DCE23D83 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
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                                                            e human salivary protein
STATH/HIS gene family.";
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                                                                                                                                                                                                                                  F.G.;
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RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Altschul S.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Romstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C.,
RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Richards S., Worley K.Ct., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Rodriguez A.C., Grimwood J.W., Green E.D., Dickeon M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
"Generation and initial analysis of more than 15,000 full-length
India and mouse cDNA sequences.";
RD Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
            EMBL; M26665; AAA58646.1; -.
EMBL; M18372; AAA51830.1; -.
EMBL; L05514; AAA02746.1; -.
EMBL; L05513; AAA02746.1; JOINED.
EMBL; BC009791; AAH09791.1; -.
EMBL; S74382; AAB32411.1; -.
                                                                                                                                                                                                                                                                                                                                   polypeptides) from human whole saliva.";
Arch. Oral Biol. 35:415-419(1990).
-!- FUNCTION: HISTATINS ARE SALIVARY PROTEINS THAT ARE CONSIDERED BE MAJOR PRECURSORS OF THE PROTECTIVE PROTEINACEOUS STRUCTURE TOOTH SURFACES (ENAMEL PELLICLE). IN ADDITION, HISTATINS EXHIB ANTIBACTERIAL AND ANTIFUNGAL ACTIVITIES.
-!- PIM: HISTATINS 4 TO 12 ARE PROTECLYTIC PRODUCTS OF HISTATIN 3.
-!- POLYMORPHISM: THERE ARE TWO ALLELES OF HIS2, HIS2(1) (SHOWN HE AND HIS2(2) THAT CODES FOR THE VARIANT HISTATIN 3-2 FOUND PRIMARILY AND IN HIGH FREQUENCIES IN BLACK POPULATIONS.
                                                                                                                                                        use by non-profit institutions as long as its content is modified and this statement is not removed. Usage by and foentities requires a license agreement (See http://www.isb-sib.or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                              This
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               parotid secretion. Isolation, characterization, primary and fungistatic effects on Candida albicans."; J. Biol. Chem. 263:7472-7477(1988).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE OF 20-51.
TISSUE-Parotid gland;
MEDLINE-88227937; PubMed=3286634;
Oppenheim F.G., Xu T., McMillian
Offner G.D., Troxler R.F.;
                                                                                                                                                                                                                                         the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sugiyama K., Ogino T., Ogata K.; "Rapid purification and characterization of histatins (histidine-rich
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE OF 20-42.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 "Two coding change mutations in the HIS2(2) salivary histatin 3-2 protein variant."; hum. Mutat. 4:12-19(1994).
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MEDLINE=22388257; PubMed=12477932;
                                                                                                                                                                                                                                                            between
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Offner G.D., Troxler R.F.;
"Histatins, a novel family of histidine-rich"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE=95038764; PubMed=7951254;
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                                                                                                                                                                                                                                       European
                                                                                                                                                                                           SWISS-PROT entry is copyright. It is produced through meen the Swiss Institute of Bioinformatics and the EN European Bioinformatics Institute. There are no restrict by non-profit institutions as long as its content field and this statement is not removed. Usage by and
                                                                                                                                                                                                                                                                                                                      SIMILARITY: TO HISTATIN 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ဝှု
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MBL outstation -
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A Oppenheim F.G., Offner G.D., Troxler R.F.;
A Desphophose of the parotic and characterization of a proline-rich phosphopeptide.";
A Diol. Chem. 257:9271-9282(1982).
C -!- FUNCTION: SALIVARY PROTEIN THAT STABILIZES SALIVA SUPERSATURATED WITH CALCIUM SALITS BY INHIBITING THE PRECIPITATION OF CALCIUM PHOSPHATE SALITS BY INHIBITING THE PRECIPITATION OF CALCIUM PHOSPHATE SALITS. IT ALSO MODULATES HYDROXYAPATITE CRYSTAL FORMATION ON THE TOOTH SURFACE.
-!- SUBCELLULAR LOCATION: Secreted.
-!- TISSUE SPECIFICITY: SECRETED BY PAROTID AND SUBMANDIBULAR CG GLANDS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
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Best Local (
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SIGNAL
PEPTIDE 2
PEPTIDE 2
PEPTIDE 2
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21-JUL-1986
15-DEC-1998
28-FEB-2003
                                                                                                                                                                                                               MEDLINE=87309161; PubMed=3476566; Oppenheim F.G., Hay D.I., Smith D.J., Offner G.D., Troxler R.F. Oppenheim F.G., Hay D.I., Smith D.J., Offner G.D., Troxler R.F. "Molecular basis of salivary proline-rich protein and peptide synthesis: cell-free translations and processing of human and m statherin mRNAs and partial amino acid sequence of their signal
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PEPTIDE
PEPTIDE
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MIM; 14
GO; GO:
GO; GO:
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
                                                                                                                                                                                                                                                                                                                                                                     Statherin precursor
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                                                                                                                                                                  SEQUENCE OF 20-61.
                                                                                                                                                                                                     peptides
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                                                                                                                                                                                                                                                                                                             Cercopithecinae;
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; GO:0003797;
; GO:0006952;
                                                                                                                                                                                                                                                                                                                                                                                                                                MACFA
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F:antibacterial p
P:defense respons
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lefense response; NAS.
Fungicide; Antibiotic; Signal; Phosphorylation;
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HISTATIN 5.
HISTATIN 6.
HISTATIN 12.
HISTATIN 11.
HISTATIN 7.
HISTATIN 7.
HISTATIN 9.
HISTATIN 4.
HISTATIN 8.
HISTATIN 8.
HISTATIN 10.
R -> Q (IN H)
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Pred. No.
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MISSING (IN HISTATIN 3-2)
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PROTEOLYTIC CLEAVAGE SITE)
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Neoptera; Endopterygota;
Neoptera; Endopterygota;
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01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence up
15-JUL-1998 (Rel. 36, Last annotation
This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the El the European Bioinformatics Institute. There are no rest:
                                                                                                                                                                                                                                                                                                        Feng X., Happ G.M.; "Isolation and sequencing protein of spermatophore of Gene 179:257-262(1996).
                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE FROM N.A. MEDLINE=97128316;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Paesen G.C., Schwartz M.B., Peferoen M., Weyda F., "Amino acid sequence of $923, a structural protein spermatophore of the mealworm beetle, Tenebrio moli J. Biol. Chem. 267:18852-18857(1992).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TISSUE=Bean-shaped accessory gland;
MEDLINE=92406806; PubMed=1527013;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Spermatophorin SP23
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                                                                             FUNCTION: STRUCTURAL PROTEIN OF A LAYER WITHIN THE WALL OF T SPERMATOPHORE PRODUCED PROBABLY BY CELL TYPE 4 OF THE BEAN-S GLAND (BAG). FIXATION IN THE SPERMATOPHORE SEEMS TO REQUIRE COVALENT CROSS-LINKING OF SPERMATOPHORINS.

SUBCELLULAR LOCATION: Secreted.
SUBCELLULAR LOCATION: Secreted.
TISSUE SPECIFICITY: SPERMATOPHORE.
DEVELOPMENTAL STAGE: EXPRESSOR AT THE BEGINNING OF THE ADULT STAGE, ABOUT FOUR DAYS AFTER THE PUPAL PEAK OF ECDYSTEROIDS.
SIMILARITY: STRUCTURAL RESEMBLANCE WITH D. MELANOGASTER 336 S38 CHORIONIC PROTEIN.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GO:0005576; C:extracellular; ISS.
GO:0030197; F:extracellular matrix constituent, lubricant.
GO:0046888; F:hydroxyapatite binding activity; ISS.
GO:0005515; F:protein binding activity; ISS.
GO:0030345; F:structural constituent of tooth enamel; ISS.
GO:0030502; P:negative regulation of bone mineralization;
GO:0046541; P:saliva secretion; ISS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B32524; SBMQPI.
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19; Conserv
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of the mealworm beetle,
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HYDROXYAPATITE-BINDING
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         64241AA8B5641A5B CRC64;
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Polyphaga; Cucujiformia;
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                    h a collaboration EMBL outstation -
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or send a
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Primates; Catarrhini; Cercopitho
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                                                Biomineralization;
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                                                                                                                                                                                                                                                                            MEDLINE=90129552;
                                                                                                                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                                                                                                         Cercopithecinae;
NCBI_TaxID=9540;
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28-FEB-2003
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PIR; JC5233; JC5233.
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                                                                                                                                                                                                                                                        "Complete primary
                                                                           GO:0005576; C:extracellular; ISS.
GO:0030197; F:extracellular matrix constituent, lubricant.
GO:0046648; F:hydroxyapatite binding activity; ISS.
GO:0005515; F:protein binding activity; ISS.
GO:0030502; F:negrative regulation of tooth enamel; ISS.
GO:0030502; P:negrative regulation of bone mineralization;
GO:0046541; P:saliva secretion; ISS.
                                                                                                                                                                             J. Pept. Protein Res. 34:374-380(1989).
FUNCTION: SALIVARY PROTEIN THAT STABILIZES SALIVA SUPERSATURATED WITH CALCIUM SALTS BY INHLBITING THE PRECIPITATION OF CALCIUM PHOSPHATE SALTS. IT ALSO MODULATES HYDROXYAPATITE CRYSTAL FORMATION ON THE TOOTH SURFACE.
                                                                                                                                                          GLANDS
                                                                                                                                                                 SUBCELLULAR LOCATION: Secreted.
TISSUE SPECIFICITY: SECRETED BY PAROTID
                                                                                                                                                 JK0224;
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                                                         Statherin;
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Hay D.I., Levine M.J.;
structure of statherin,
structure of statherin,
                                              Phosphorylation
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Pred. No. 0.12
12; Mismatches
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(INHIBITS PRECIPITATION
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                                                                                                                                                                                                                                                a potent inhibitor saliva of the monk
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01-FEB-1994 (Rel. 28, C
01-FEB-1994 (Rel. 28, I
15-SEP-2003 (Rel. 42, I
                                                                                                                                                                                                                                                                                 STRAIN=New Zealand white;
Hiripi L., Devinoy E., Rat P., Baranyi M.
"Polymorphism of the rabbit kappa-casein
both 1800 nt and 100 nt in two intronic z
microsatellites and similar to LINE.";
EMBL; Z18243; CAA79145.1;
EMBL; U44057; AAC48796.1;
EMBL; U44055; AAC48796.1;
EMBL; U44056; AAC48796.1;
                                                                              the European Bioinformatics Institute. The use by non-profit institutions as long modified and this statement is not removed.
                                                                                                                This SWISS-PROT entry is copyright. It is produced throubetween the Swiss Institute of Bioinformatics and the
                                                                                                                                                                casein precipitation in milk.
-!- SUBCELLULAR LOCATION: Extracellular.
-!- TISSUE SPECIFICITY: MAMMARY GLAND; MILK.
                                                                                                                                                                                                                          STRAIN=New Zealand Dawson S.P.;
                                                                                                                                                                                                                                                                                                                                                                               "Structure of the rabbit kappa-casein the cloned gene in the mammary gland of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STRAIN=New Zealand white; TISSUE=Mammary gland MEDLINE=94059363; PubMed=8240676;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RABIT
                                                        or send
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                                                                                                                                                                                                                                                                                                                                                                       Gene
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                                                                                                                                                                                                                                                                                                                                                                                                                    Baranyi
                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
STRAIN=New Zealand white;
MEDLINE=97017124; PubMed=
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Bosze Z., Devinoy E., Puissant C., Fontai "Characterization of rabbit kappa-casein gene expression in vivo and in vitro.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Oryctolagus cuniculus (Rabbit).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Kappa casein precursor. CSN3 OR CSN10 OR CSNK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CASK_RABIT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
                                                                                                                                                    -!- SIMILARITY: Belongs to the kappa-casein family.
                                                                                                                                                                                                              Thesis (1993),
                                                                                                                                                                                                                                                   SEQUENCE
                                                                                                                                                                                                                                                                                                                                             SEQUENCE OF 31-180 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mammalia; Eutheria; Lagomorpha;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mol.
                                                                                                                                                                                                  sis (1993), Nottingham University, U.K. FUNCTION: Kappa casein stabilizes micelle
                                                                                                                                                                                                                                                                                                                                                                    cloned gene in the 174:27-34(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             expression in vivo and in vi
ol. Endocrinol. 11:9-17(1993)
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18; Conser
                                                        s requires a license agreement (S
an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                   M., Aszodi A.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STANDARD;
                                                                                                                                                                                                                                                                                                                                                                                                                   PubMed=8863725; i A., Devinoy E.,
                                                                                                                                                                                                                                     FROM N.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chordata;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Last
Last
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Created)
                                                                                                                                                                                                                         e; TISSUE=Mammary gland;
                                                                                                                                                                                                                                                                         the EMBL/GenBank/DDBJ databases
JOINED.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                annotation
                                                                                                                                                                                                                                                                                   two intronic regions to LINE.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 70.5; DI
Pred. No. 0.11,
4; Mismatches
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E0630E5B1184C506 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Craniata; Vertebrata; Euteleostomi; a; Leporidae; Oryctolagus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fontaine M.L.,
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of transgenic mice.
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                                                                   (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                     3
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                                                                                          There are no restrictions ng as its content is in
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ene. Presence
                                                                              Usage
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control of kappa-casein
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                                                                                                                                                                                                                                                                                                                    M.L.,
                                                                                 and
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                                                                                                                    EMBL
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                                                                                                                  collaboration
                                                                                 commercia.
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EMBL; AF033505; AAD48079.1; EMBL; X76910; CAA54232.1; PIR; JC4955; JC4955.

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Best Local
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                                  EMBL; AF386649; AAL26987.1; -.
EMBL; Y12059; CAA72780.1; -.
HSSP; Q92281; 1B91.
Genew; HGNC:13575; BRD4.
InterPro; IPR001487; Bromodomain.
Pfam; PF00439; bromodomain; 2.
PRINTS; PR00503; BROMODOMAIN.
SMART; SMOO297; BROMO; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BRD4 HUMAN S
060885; Q96PD3;
16-OCT-2001 (Rel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ProDom;
Milk; Gl
                                                                                                                                                This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                             Submitted (MAR-1997) to the EMBL/GenBank/DDBJ-!- SUBCELLULAR LOCATION: Nuclear (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16-OCT-2001 (Rel. 40, Created)
28-FEB-2003 (Rel. 41, Last sequence update)
28-FEB-2003 (Rel. 41, Last annotation updat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pfam; PF00997; casein_kappa;
ProDom; PD003689; Casein_kapp
              PROSITE; PS00633; BROMODOMAIN_1; 1. PROSITE; PS50014; BROMODOMAIN_2; 2.
                                                                                                                                                                                                                                                  -!- SUBCELLULAR LOCATION: Nuclear (Poten -!- SIMILARITY: Contains 2 bromodomains.
                                                                                                                                                                                                                                                                                                                                       Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                    French C.A., Fletcher J.A.;
"Human BRD4 protein.";
                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                                                                    BRD4 OR HUNK1
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bromodomain-containing
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SIGNAL
                                                                                                                                                                                                                                                                                                    TISSUE=Placenta;
                                                                                                                                                                                                                                                                                                                SEQUENCE OF 1-722 FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Glycoprotein; Phosphorylation; Signal.
                                                                                                                                                                                                                                                                                       Β.
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|SY 63
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166
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116
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 Repeat;
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117
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Primates;
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  Nuclear protein
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Pred. No. 1.2;
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YP -> HT (IN REF. 4).
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                                                                                                                                                                                                                                                                                                                                                                                                               Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRT;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A1F058E01725F56E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 (HUNK1 protein).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -> R (IN REF.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1362
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                                                                                                                                                                                                                                                                          databases
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RESULT 9
YD3D_SCHPO
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RA Sgouros J., Peat N., Hayles J., Baker S., Basham D., Bowman S.,
RA Brooks K., Brown D., Brown S., Chillingworth T., Churcher C.N.,
RA Brooks K., Brown D., Brown S., Chillingworth T., Churcher C.N.,
RA Gentles S., Goble A., Hamlin N., Harris D., Hidalgo J., Hodgson G.,
RA Gentles S., Goble A., Hamlin N., Harris D., Hidalgo J., Hodgson G.,
RA Holroyd S., Hornsby T., Howarth S., Huckle E.J., Hunt S., Jagels K.,
James K., Jones H., Leather S., McDonald S., McLean J.,
RA Mooney P., Moule S., Mungall K., Murphy L., Niblett D., Odell C.,
RA Mooney P., Moule S., Mungall K., Murphy L., Niblett D., Odell C.,
RA Moliver K., O'Neil S., Pearson D., Quail M.A., Rabbinowitsch E.,
RA Kutherford K., Rutter S., Saunders D., Seeger K., Sharp S.,
RA Kelton J., Simmonds M., Squares R., Squares S., Stevens K.,
RA Skelton J., Simmonds M., Squares R., Squares S., Stevens K.,
RA Woodward J., Volckaert G., Aert R., Robben J., Grymonprez B.,
RA Woodward J., Volckaert G., Aert R., Robben J., Grymonprez B.,
RA Woodward J., Volckaert G., Aert R., Robben J., Grymonprez B.,
RA Woodward J., Volckaert G., Aert R., Robben J., Grymonprez B.,
RA Gabel C., Fuchs M., Fritzc C., Holzer E., Moestl D., Hilbert H.,
RA Borzym K., Langer I., Beck A., Lehrach H., Reinhardt R., Pohl T.M.,
RA Borzym K., Langer I., Beck A., Lehrach H., Reinhardt R., Pohl T.M.,
RA Geffeau A., Cadieu E., Dreano S., Gloux S., Lelaure V., Mottier S.,
RA Galibert F., Aves S.J., Xiang Z., Hunt C., Moore K., Hurst S.M.,
RA Galibert F., Aves S.J., Xiang Z., Hunt C., Moore K., Hurst S.M.,
RA Galibert F., Aves S.J., Xiang Z., Hunt C., Moore K., Hurst S.M.,
RA Galibert F., Aves S.J., Xiang Z., Hunt C., Moore K., Hurst S.M.,
RA Galibert F., Aves S.J., Xiang Z., Hunt C., Moore K., Hurst S.M.,
RA Galibert F., Aves S.J., Xiang Z., Hunt C., Moore K., Hurst S.M.,
RA Galibert F., Gryman M., Weller H., Pohlada V.A., Garzon A., Thode G.,
RA Dominguez A., Revuelta J.L., Moreno S., Armstrong J., Forsburg S.L.,
RA Spakovski G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
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Best Local
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Q10277;
01-OCT-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-OCT-1996 (Rel. 34, Created)
01-OCT-1996 (Rel. 34, Last sequence update)
28-FBB-2003 (Rel. 41, Last sequence update)
Hypothetical RNA-binding protein C1367.13c in chromosome
SPAC13G7.13C OR SPAC6C3.01C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DOMAIN
DOMAIN
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Schizosaccharomyces pombe (Fission yeast).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MEDLINE=21848401; PubMed=11859360;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Schizosaccharomycetales;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CONFLICT
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Schizosaccharomycetaceae;
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POLY-ALA.
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Pred. No. 1
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SER-RICH.
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D52EFE1CF9960907 CRC64;
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Best Local
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01-JAN-1988
01-JAN-1988
                                                                                                                               SEQUENCE OF 272-283 AND 286-292.

STRAIN-CV. Bomi; TISSUE-Starchy endosperm;
MEDLINE-21088911; PubMed=11271488;

Kristoffersen H.E., Flengsrud R.;
"Separation and characterization of basic barley
"Separation and characterization of basic barley
"Separation and characterization of basic barley
"Separation STORAGE PROTEIN.
-i- FUNCTION: SULFUR-RICH SEED STORAGE PROTEIN.
-i- TISSUE SPECIFICITY: DEVELOPING ENDOSPERM.
                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.

MEDLINE=86041918; PubMed=4059057;

MEDLINE=86041918; PubMed=4059057;

Forde B.G., Heyworth A., Pywell J., Kreis M.;

"Nucleotide sequence of a B1 hordein gene and the identification of possible upstream regulatory elements in endosperm storage protein genes from barley, wheat and maize.";

Nucleic Acids Res. 13:7327-7339(1985).
           use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                              Hordeum vulgare (Barley).
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; Pooideae;
Triticeae; Hordeum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       B1-hordein precursor
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PROSITE; PS00030; RRM RNP 1; FALSE NEG.

Hypothetical protein; RNA-binding; Repeat.

DOMAIN 79 158 RNA-BINDING (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GeneDB SPombe; SPAC13G7.13c; -.
InterPTo; IPRO0504; RNA_rec_mot.
Pfam; PF00076; rrm; 2.
SMART; SM00360; RRM; 2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           EMBL; Z69731; CAA93614.1; -.
EMBL; Z69729; CAA93601.1; -.
PIR; T39025; T39025.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          16-OCT-2001 (Rel.
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                                                                    s SWISS-PROT entry is copyright. It is produced through ween the Swiss Institute of Bioinformatics and the En European Bioinformatics Institute. There are no resti
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SIMILARITY: Contains 2 RNA recognition motif (RRM) SIMILARITY: TO YEAST YHL024W.
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17; Conserv
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533 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STANDARD;
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40, Last annotation update)
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Pred. No. 5.8;
10; Mismatches
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                                               There are no rest
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                                                                                  EMBL outstation
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         Query Match
Best Local S
Matches 18
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P07498; Q13575;
01-APR-1988 (Rel. 07, Created)
01-OCT-1996 (Rel. 34, Last seq
15-SEP-2003 (Rel. 42, Last ann
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SEQUENCE
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InterPro; IPR001954; Glia glutenin
Pfam; PF00234; tryp_alpha_amyl; 1.
PRINTS; PR00208; GLIADGLUTEN.
                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM
                                                                                                                                                                                                                                                                                                                                                                                                        Gene 174:65-69(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                      "Structure of the human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Stroemqvist M.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MEDLINE=93208373; PubMed=1296818; MEDLINE=93208373; MEDLINE=93208375; MEDLIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Kappa casein precursor.
CSN3 OR CSN10 OR CSNK OR CASK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HUMAN
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                                                                                                                                                                                                                                                                                                                                                TISSUE=Brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=97017129; PubMed=8863730;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        "Cloning
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
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S., Jeffers
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293 AA;
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nilarity 31.0%;
Conservative
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) to the EMBL/GenBank/DDBJ databases.
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                                                                                                                                                                                                                                                                                                                                                                                                                      T., Leidvik B.,
man kappa-casein
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        of human kappa-casein cDNA.";
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
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gene.";
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Milk; P
                                                                                                                                                                  SITE
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                                                                                                                                                                                                                                                                                                                   EMBL; M73628; AAA59456.1; -. EMBL; X66417; CAA47048.1; -. EMBL; U51899; AAC50772.1; -. EMBL; BC010935; AAH10935.1;
                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MEDLINE-85258132; PubMed-4018271; MEDLINE-Chtourou A., Ribadeau-Dumas
                                                                                                                                                                                                                                                                       MIM;
                                                                                                                                                                                                                                                                                 GlycoSuiteDB; P07498; -. Genew; HGNC:2446; CSN3.
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-!- SUBUNIT: HETEROMULTIMERS COMPOSED OF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=99207197; PubMed=10191473;
Plowman J.E., Creamer L.K., Liddell M.J., Cross
"Structural features of a peptide corresponding
residues 84-101 by 1H-nuclear magnetic resonance
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE=81114144; PubMed=7460900; Fiat A.M., Jolles J., Aubert J.-P., Louche "Localisation and importance of the sugar Eur. J. Biochem. 111:333-339(1980).
                                                                                                                              CARBOHYD
                                                                                                                                                                                       SIGNAL
                                                                                                                                                                                                             Pfam; PF00997; casein_kappa;
ProDom; PD003689; Casein_kapp
                                                                                                                                                                                                                                                                                                          PIR; JC4957; KKHU
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                                                                                                                                                                                                                                     InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         "Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                 ; 601695; -.
GO:0005576; C:extracellular; NAS.
GO:0007582; P:physiological proces
erPro; IPR000117; Casein_kappa.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUBCELLULAR LOCATION: Extracellular.
TISSUE SPECIFICITY: MAMMARY GLAND; MILK.
PTM: The N-terminus is blocked.
SIMILARITY: Belongs to the kappa-casein family.
DATABASE: NAME-Protein Spotlight;
NOTE-Issue 16 of November 2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     WWW="http://www.expasy.org/spotlight/articles/sptlt016.html".
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  Glycoprotein;
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human kappa-casein.";
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e spectroscopy.";
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-I- FUNCTION: With Hgp90 it forms a complex that binds to several kinases, resulting in stabilization and promotion of their
                                                                                                                                                                                                                                                                                                                                                 between the Swiss Institute of Bioinformatics and the Fi
the European Bioinformatics Institute. There are no rest
use by non-profit institutions as long as its content
modified and this statement is not removed. Usage by an
entities requires a license agreement (See http://www.isb-
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28-FEB-2003 (Rel. 41, Last annotation update)
Hsp90 co-chaperone Cdc37 (Hsp90 chaperone protein
                                                                                                                                                                                        SEQUENCE
                                                                                                                                                                                                                               InterPro; IPR004918; (Pfam; PF03234; Cdc37;
                                                                                                                                                                                                                                                                                    EMBL; AF091237; AAG00066.1; -.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Actinopterygii; Neopterygii; Teleostei; Eute
Acanthomorpha; Acanthopterygii; Percomorpha;
Tetradontoidea; Tetraodontidae; Tetraodon.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Tetraodon fluviatilis (Puffer fish).
Eukaryota; Metazoa; Chordata; Craniata;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         subunit) (p50Cdc37).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID=47145;
                                                                                                                                                                                                                                                                                                                                send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SUBCELLULAR LOCATION:
SIMILARITY: BELONGS TO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     kinases, resulting in stabilization and promotion of their activity (By similarity).
SUBUNIT: Forms a complex with Hsp90. Interacts with CDK4 and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    (By similarity)
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                                              17 IRADSSEEKRHRKRKKH-------HRGYFQQYQPYQRYPLNYP 52
                                                                                            14;
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17; Conserv
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VKADSAEDTEEEKEKKHKTFVERYEKQIKHFGMLHRWDDSQRYLSDNP
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THE CDC37 FAMILY.
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3; Mismatches
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Euteleostei; Neoteleostei
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Tetraodontiformes;
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RESULT 13
CASB_HUMAN
ID CASB_HUMAN
AC P05814;

STANDARD;

PRT;

226 AA

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EMBL; X17070; CAA34916.1; -.
EMBL; X13766; CAA32017.1; -.
EMBL; AF027807; AAC82978.1; -.
EMBL; X55739; CAA39270.1; -.
EMBL; A5287; CAA02017.8.1; -.
EMBL; A30262; CAA02017.1; -.
PIR; I53730; KBHU.
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Beta casein precurso..

CSN2 OR CASB.

Homo sapiens (Human).

Eukaryota; Metazoa; Chordata;

Eukaryota; Metazoa; Primates;
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01-AUG-1992
15-JUL-1998
                                                                                                                                                        This SWISS-PROT entry is copyright. It is produced through a collable between the Swiss Institute of Bioinformatics and the EMBL outset the Buropean Bioinformatics Institute. There are no restrictions use by non-profit institutions as long as its content is in modified and this statement is not removed. Usage by and for commodified and this statement is not removed.
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                                                                                                                                                                                                                                                                                                    phosphorylation sites.";

J. Biol. Chem. 259:5132-5138 (1984).

-i- FUNCTION: IMPORTANT ROLE IN DETERMINATION
PROPERTIES OF THE CASEIN MICELLES.

-i- SUBCELLULAR LOCATION: Extracellular.

-i- TISSUE SPECIFICITY: MAMMARY GLAND; MILK.
                                                                                                                                                                                                                                                                                                                                                                                           Greenberg R., Groves M.L., Dower H.J., "Human beta-casein. Amino acid sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE OF 16-226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDLINE=89240053; PubMed=2717418; Menon R.S., Ham R.G.; "Human beta-casein: partial CDNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MEDLINE=94156198; PubMed=8112603;
Hansson L., Edlund A., Johansson T., Hernell O.,
Lindquist S., Loennerdal B., Bergstroem S.;
"Structure of the human beta-casein encoding gene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Nucleic Acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE OF 161-226 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Submitted (DEC-1997) to the EMBL/GenBank/DDBJ databases.
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Submitted (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                "Cloning and sequencing of a cDNA encoding human milk beta-casein."; TBBS Lett. 269:153-156(1990).
                                                                                                                                                                                                                                                                          SIMILARITY: BELONGS TO THE BETA-CASEIN FAMILY. DATABASE: NAME-Protein Spotlight;
                                                                                                                                                                                                                                             WWW="http://www.expasy.org/spotlight/articles/sptlt016.html".
                                                                                                                                                                                                                                                             NOTE=Issue 16 of November 2001;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  139:193-199(1994).
                                                                                                                             requires a license agreement (Some an email to license@isb-sib.ch).
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(Rel. 23,
(Rel. 36,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      asein: partial cDNA sequence and Res. 17:2869-2869(1989).
CSN2
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   update)
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                                                                                                                                                                                                                                                                                                                                                  THE SURFACE
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RESULT 14
C1KA_BACT
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Matches 22
                       MEDLINE-56; PubMed-8586263;

MEDLINE-56102856; PubMed-8586263;

RCOoning of a novel crystal protein gene cry1K from Bacillus churingiensis subsp. morrisoni.";

FEMS Microbiol. Lett. 134:159-164(1995).

-i- FUNCTION: PROMOTES COLLOIDOSMOTIC LYSIS BY BINDING TO THE MIDGUT EPITHELIAL CELLS OF INSECTS. SELECTIVELY TOXIC TO ARTOGEIA RAPAE AND NOT ACTIVE ON PLUTELLA XYLOSTELLA.

-i- DEVELOPMENTAL STAGE: THE CRYSTAL PROTEIN IS PRODUCED DURING SPORULATION AND IS ACCUMULATED BOTH AS AN INCLUSION AND AS PART OF THE SPORE COAT.
                                                                                                                                                                                                                                                     Q45715;
30-MAY-2000
30-MAY-2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MIM; 115460; -.
GO; GO:0005509; F:calcium ion binding activity; T;
GO; GO:0004857; F:enzyme inhibitor activity; TAS.
GO; GO:0005189; F:milk protein; TAS.
CO: GO:0005189; P:calcium ion transport; TAS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CONFLICT
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MOD_RES
MOD_RES
                                                                                                                                                                                                                                                                                                 BACTM
                                                                                                                                                                                                           30-MAY-2000 (Rel. 39, Last sequence update)
16-CCT-2001 (Rel. 40, Last annotation update)
Pesticidial crystal protein cry1Ka (Insecticidal
CryIK(a)) (Crystaline entomocidal protoxin) (137
CRY1KA OR CRYIK(A) OR CRYIK.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOD_RES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE; PS00306; CASE
Milk; Phosphorylation;
SIGNAL 1 15
                                                                                                                                                  STRAIN=F190
                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                      Bacillus thuringiensis (subsp. morrisoni).
Bacteria; Firmicutes; Bacillales; Bacillac
                                                                                                                                                                                                                                                                                    C1KA_BACTM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
                                                                                                                                                                            NCBI_TaxID=1441;
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PROSITE; PS00306; CASEIN_ALPHA_BETA;
SIMILARITY: BELONGS TO THE DELTA ENDOTOXIN FAMILY
                    MISCELLANEOUS: TOXIC SEGMENT OF
                                                                                                                                                                                                                                                                                                                                         82
                                                                                                                                                                                                                                                                                                                                                             43
                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
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MISSING (IN REF. 2)
EDE -> TDO ''''
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T -> P (IN REF.
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Signal.
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                   PROTEIN IS LOCATED IN THE
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N REF. 6).
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kDa crystal pro
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RESULT 15
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HSSP; P02965; ICIY.
InterPro; IPR001178; Endotoxin.
InterPro; IPR005638; endotoxin_C.
InterPro; IPR005639; endotoxin_N.
Pfam; PP00555; endotoxin; 1.
Pfam; PF03944; endotoxin_C; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MOBA THIFE P22898; 01-AUG-1991 01-AUG-1991 01-JUL-1993
                                                                                               Plasmid.
NON TER
SEQUENCE
                                                                                                                                                           EMBL; M57717; AAA27389.1; -. PIR; A43256; A43256. InterPro; IRR005094; Relaxase.
                                                                                                                                                                                                                                              This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/
                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A.

MEDLINE=93015664; PubMed=1400173;

MEDLINE=93015664; PubMed=1400173;

Rohrer J., Rawlings D.E.;

"Sequence analysis and characterization of the mobilization region of a broad-host-range plasmid, pTF-FC2, isolated from Thiobacillus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Bacteria; Proteobacteria; Gammaproteobacteria; Acidithiobacillales; Acidithiobacillaceae; Acidithiobacillus.
                                                                                                                                                                                                                                  or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SEQUENCE
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                                                                                                                                               Pfam; PF03432; Relaxase; 1.
                                                                                                                                                                                                                                                                                                                                                                  J. Bacteriol. 174:6230-6237(1992).
                                                                                                                                                                                                                                                                                                                                                                                ferrooxidans."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Plasmid pTF-FC2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Thiobacillus ferrooxidans.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Toxin;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NCBI_TaxID=920
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11;
                             ch 18.7%; Score 59; DB 1; Length 409; I Similarity 29.3%; Pred. No. 19; 12; Conservative 14; Mismatches 7; Indels
9 IMALILAMIRADSSEEK----RHRKRKKHHRGYFQQYQPY 44
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                                                                                                 46836 MW; 27C6593202572FE2 CRC64;
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Pred. No. 41;
8; Mismatches 18; Indels
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Search completed: December 13, 2003, 03:07:42
Job time : 19 secs

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Result
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Maximum Match 100%
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1: sp_archea:*
2: sp_bacteria:*
3: sp_fungi:*
4: sp_human:*
5: sp_invertebrat(6: sp_mammal:*
7: sp_mhc:*
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sp_phage:*
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08MPZ9

095NFT1

08N026

08N024

08N031

09W2R5

014329

08T011

09LFR6

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09VZX4

09VZX4

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09VZX4
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Q9VKMS
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                             Oyvkm5 drosophila
O02586 spirometra
O8mpz9 caenorhabdi
O95nf1 spirometra
O8mp26 drosophila
O8n026 drosophila
O8n026 drosophila
O8n027 drosophila
O8n031 drosophila
O9w2r5 drosophila
O9w2r5 drosophila
O9w2r5 drosophila
O941210 hordeum vul
O14329 schizosacch
O8t011 drosophila
O91fr6 arabidopsis
Q8t9g4 drosophila
Q9vzx4 drosophila
Q9phj1 xylella fas
                                                                                                                                                          Q8hy86 bos taurus
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45	44	43	42	41	40	39	38	37	36	ω 5	34	ω G	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17
61.5	61.5	61.5	61.5	62		62		62		•	•	62.5	•	63	63	63	63.5	ü	63.5	ω.	64	64	65	65	65	65	65	65.5
19.5	19.5	19.5	19.5	19.6	19.6	19.6	19.6	٠	٠	19.8	•	19.8	•	•	19.9	19.9	20.1	20.1	20.1	20.1	20.3	20.3	٠	20.6	•		•	20.7
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Q961E9	Q8T829	Q9VXJ3	Q9GKK3	Q94DL2	Q9ULD9	Q25826	Q8I1Q9	Q8N021	Q9LIIS	Q8ILB9	Q9ZB47	Q9FUW7	Q9LG58	Q8GRA2	081105	Q8S8M0	Q9NDN7	Q8H1U2	Q8Z099	Q8T3D9	Q9VG78	Q22029	Q8H4N1	Q40055	Q17504	Q9XWV4	Q40053	045916
			(D)	N	Q9uld9 homo sapien		Q8ilq9 plasmodium	ď	S		w	7	Q9lg58 oryza sativ			Q8s8m0 arabidopsis	Q9ndn7 tenebrio mo	gossypium	Q8z099 anabaena sp		Q9vg78 drosophila	\sim	Q8h4n1 oryza sativ	Q40055 hordeum vul	Q17504 caenorhabdi		Q40053 hordeum vul	O45916 caenorhabdi

ALIGNMENTS

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RESULT 2
Q9VKM5
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Q8HY86
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Best Local S
Matches 32
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01-MAR-2003
01-MAR-2003
01-MAR-2003
Q9VKM5 PRELIMINARY; KKI;
Q9VKM5;
01-MAY-2000 (TrEMBLrel. 13, Created)
                                                                                                                                                                                                      SEQUENCE FROM N.A.

TISSUB-Salivary gland;
TISSUB-Salivary gland;
Rijnkels M., Elnitski L., Miller W., Rosen J.M.;
"Multi-species comparative sequence analysis of the casein coluster region: A gene domain encoding epithelial secretory proteins.";
Submitted (SEP-2002) to the EMBL/GenBank/DDBJ databases.
EMBL; AX154893; AAN85581.1;
EMBL; AX154893; AAN85581.1;
EEQUENCE 59 AA; 7093 MW; EE9866EE60B21F25 CRC64;
                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea; Bovidae; Bovinae; Bos. NCBI_TaxID=9913;
                                                                                                                                                                                                                                                                                                                                                                                                                       Statherin.
                                                                                                                                                                                                                                                                                                                                                                                             Bos taurus (Bovine).
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                                                                                                                                                                   Similarity
                                                                                                                      MKIFIFVFIMALILAMIRADSSEEKRHRKKKHHRGYFQQYQPY-QRYPLNYPPAYPFP
                                                                                                 MKIFFFAFIMALMVAMIKADSSEEE-HRLRFNPRFYYPNOQGGYIPSYPA-YPYPYPYP
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                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRELIMINARY;
                                                                                                                                                                 39.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                 Created)
Last sequence update)
Last annotation update)
                                                                                                                                                      5
                                                                                                                                                  Score 123.5; DB 6;
Pred. No. 4.4e-08;
5; Mismatches 19;
                                  192
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                                                                                                                                                                             DB 6; Length 59;
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01-MAY-2000 (TrE) 01-OCT-2002 (TrE) CG16743 protein CG16743.

(TrEMBLrel. 13, Last sequence update) (TrEMBLrel. 22, Last annotation update) :ein (RH23514p).

Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha; Ephydroidea; Drosophilidae; Drosophila.

Drosophila melanogaster (Fruit fly)

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RA Adams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,
RA Mannatidee P.G., Scherer S.E., Holt R.A., How, Hockins R.A., Galle R.F.,
RA George R.A., Levis S.E., Richards S., Ashburner M., Henderson S.N.,
RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Burtis K.C., Busam D.A., Deng J., Mayraktaroglu L., Beasley E.M.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Dunkov B.C., Dunn P.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Denke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Denke C., Davenport L.B., Davies P.,
RA Cherry J.M., Cawley S., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Glodek A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
RA Harris N.L., Harvey D., Heinan T.J., Hernandez J.R., Houck J.,
RA Harris N.L., Harvey D., Heinan T.J., Wei M.-H., Ibegwam C.,
RA Kimmel B.E., Kodira C.D., Kraft C., Kraviz S., Kulp D., Lai Z.,
RA Kimmel B.E., Kodira C.D., Kraft C., Kraviz S., Kulp D., Lai Z.,
RA Merkulov G., Milshina N.V., Mobarry C., Morris J., Moshredi A.,
RA Melson D.R., Nelson K., Nixon K., Nusskern D.R., McCherson D.,
RA Ra Melson D.R., Nelson K., Nixon K., Nusskern D.R., Recleb J.M.,
RA Mennath S.M., Modage T., Weinstock G.M., Weissenbach J.,
RA Svirskas R., Tector C., Turner R., Venter F., Shen H.,
RA Sylme B.C., Standers R., Zhan M., Zhang G., Zhao Q., Zheng L.,
RA Gibbs R.A., Massarman D.A., Weinstock G.M., Weissenbach J.,
RA Gibbs R.A., Massarman D.A., Shan M., Zhang G
                                                                                              Query Match
Best Local :
                                                                           Matches
                                                                                                                                                                                                                                                                                                           Stapleton M., Brokstein P., Hong L., Agbayani A., Carlson J., Frise E., Champe M., Chavez C., Dorsett V., Dresnek D., Farfan D., Frise E., George R., Gonzalez M., Guarin H., Kronmiller B., Li P., Liao G., Miranda A., Mungall C.J., Nunco J., Pacleb J., Paragas V., Park S. Patel S., Phouanenavong S., Wan K., Yu C., Lewis S.E., Rubin G.M.,
                                                                                                                                                                      EMBL; AE003630; AAF53039.1; -.
EMBL; AY119164; AAM51024.1; -.
FlyBase; FBgn002322; CG16743.
InterPro; IPR002965; P rich extensn.
PRINTS; PR01217; PRICHEXTENSN.
                                                                                                                                                                                                                                                                                               Patel S., Ph
Celniker S.;
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                                                                                              Similarity
                                  VFIMALILAMIRAD------SSEEKRHRKRKKHHR-------GY--FQQ-----
                                                                                                                                                                                                                                                                          (JUN-2002) to the EMBL/GenBank/DDBJ
                                                                                                                                                         192 AA;
                                                                           Conservative
                                                                                                                                                       20751 MW;
                                                                                            23.7%;
                                                                         12;
                                                                                            Score 75;
Pred. No.
                                                                                                                                                         DD2363009DD7DDED CRC64;
                                                                           Mismatches
                                                                                            0.16;
                                                                                                            DB 5; Length 192;
                                                                         15;
                                                                                                                                                                                                                                                                          databases.
                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                    Frise E.,
Liao G.,
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                                                                         34;
                                                                       Gaps
                                      40
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RESULT 4
Q8MPZ9
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Best Local
Submitted [2]
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                                                                                                         Eukaryota; Metazoa; Nematoda; Rhabditidae; Peloderinae; Caer MCBI_TaxID=6239;
                                                                                                                                                                                                                                                    01-OCT-2002 (TrEMBLrel.
01-OCT-2002 (TrEMBLrel.
01-MAR-2003 (TrEMBLrel.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ProDom; PD000158; Peptidase_C1; 1.

SMART; SM00645; Pept C1; 1.

PROSITE; PS00640; THIOL PROTEASE_ASN; 1.

PROSITE; PS00139; THIOL PROTEASE_HIS; 1.

PROSITE; PS00639; THIOL_PROTEASE_HIS; 1.

PROSITE; PS00639; THIOL_PROTEASE_HIS; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Spirometra erinaceieuropaei.
Eukaryota; Metazoa; Platyhelminthes;
Pseudophyllidea; Diphyllobothriidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                002586; 002585;
01-JUL-1997 (Tr
                                                                                                                                                                               Caenorhabditis elegans.
                                                                                                                                                                                                         R07B5.9 protein. R07B5.9.
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InterPro; IPR000169; SHprot acsite.
Pfam; PF00112; Peptidase_C1; 1.
PRINTS; PR00705; PAPAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; D63671; BAA09821.1; -. EMBL; D63670; BAA09820.1; -.
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                                           Kelly P
                                                                   SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mol. Biochem. Parasitol. 76:11-21(1996).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Liu D.W., Kato H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE=97077424; PubMed=8919991;
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                        (MAY-1996) to
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cloning and expression of the gene encoding a cysteine
of Spirometra erinacei.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             336 AA; 37871 MW;
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                                                                                                                                      oda; Chromadorea; Rhabditida; Rhabditoidea; Caenorhabditis.
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Pred. No. 0.
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Spirometra.
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Matches 19
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                                                                                                                                                                                                                                 PRINTS; PR00705; PAPAIN.

ProDom; PD000158; Peptidase C1; 1.

SMART; SM00645; Pept C1; 1.

PROSITE; PS00640; THTOL_PROTEASE ASN; 1.

PROSITE; PS00139; THIOL_PROTEASE CYS; 1.

PROSITE; PS00639; THIOL_PROTEASE_HIS; 1.

Hydrolase; Protease; Thiol protease.

SEQUENCE 336 AA; 37775 MW; FD70B02F11F12333 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hirai K., Wang H., Fukumoto S., Sato K., Tademoto S.;
"An unusual mRNA for plerocercoid growth factor (PGF-E2)/cysteine protease with UUG initiation code from plerocercoids of Spirometra erinaceleuropaei.";
Submitted (PEB-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; Z72512; CAD44143.1; -. WormPep; R07B5.9; CE31575. SEQUENCE 660 AA; 72956 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                             InterPro; IPR000668; Peptidase_C1.
InterPro; IPR000169; SHprot_acsite.
Pfam; PF00112; Peptidase_C1; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EMBL; AB055646; BAB62799.1; -. EMBL; AB055411; BAB62718.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           "Molecular cloning and characterization of a growth fact plerocercoids of Spirometra erinaceieuropaei."; Submitted (FEB-2001) to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Spirometra erinaceieuropaei.
Eukaryota; Metazoa; Platyhelminthes;
Eseudophyllidea; Diphyllobothriidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PGF-E2 OR PGF-E.
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01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2003 (TrEMBLrel. 23, Last annotation update)
Plerocercoid growth factor-2/cysteine protease (Ple
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Q95NF1
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MEDLINE=99069613; PubMed=9851916;
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Science 282:2012-2018(1998).
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----KHIRGYFQQYQPY 44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wang H.,
                                                                                                                                                Conservative
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Pred. No.
                                                                                                                                                                    Score 68.5;
Pred. No. 1.
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Spirometra.
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01-OCT-2002 (TrEMBLrel. 22,
01-MAR-2003 (TrEMBLrel. 23,
                                                                                                                                                                                                                     Drosophila triauraria.
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
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NON_TER 1 1 1
NON_TER 165 165
SEQUENCE 165 AA; 18261 MW;
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group (Diptera: Drosophilidae).";
Biol. J. Linn. Soc. 76:21-37(2002).
EMBL; AF461343; AAM28799.1; -.
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01-OCT-2002 (TrEMBLrel. 22,
01-MAR-2003 (TrEMBLrel. 23,
                                                                                      SEQUENCE
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                                                                                                                                 "Phylogeny of a paradigm lineage: the Drosophila melanogaster species group (biptera: Drosophilidae)."; Biol. J. Linn. Soc. 76:21-37 (2002).
EMBL; AF461345; AAM28801.1; -.
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Ephydroidea; Drosophilidae;
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Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
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AASSQLEQFLKQQQHHQQQQQQQHQPHQQQPMD
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                                                                                       18261 MW; DF8E744F1795604A CRC64;
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Adams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,
A. Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F.,
A. Amanatides P.G., Scherer S.E., Richards S., Ashburner M., Henderson S.N.,
A. George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
A. Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
A. Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
A. Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
A. Barandon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
A. Wan K.H., Doyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G.,
A. Wan K.H., Doyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G.,
A. Wan K.H., Doyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G.,
A. Wan K.H., Doyle C., Baxendale J., Bayraktaroglu L., Beasley E.M.,
A. Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
A. Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
A. Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
A. Borkova D., Botchan M.R., Bouck J., Brockstein P., Brottier P.,
A. Bortova D., Botchan M.R., Bouck J., Brockstein P., Brottier P.,
A. Bortova D., Botchan M.R., Bouck J., Brockstein P., Brottier P.,
A. Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
A. Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
A. Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
A. Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
A. Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
A. Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
A. Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
A. Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
A. Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
A. Cherry J.M., Cawley S., Dahlke C., Davies P.,
A. Cherry J.M., Cawley S., Dahlke C., Davies P.,
A. Cherry J.M., Cawley S., Davies M., Davies P.,
A. Cherry J.M., Cawley S., Davies M., Davies P.,
A. Cherry J.M., Cawl
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Q9W2R5;
01-MAY-2000
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Q8N031;
01-OCT-2002
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EMBL; AF461338; AAM28794.1; -.
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Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
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18261 MW;
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                                                                                                                                                                                                                                                                                               Best
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Best Local (
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01-NOV-1996
01-NOV-1996
01-MAR-2003
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InterPro; It...
PR01217;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDLINE=93380629; PubMed=8396543; Sainova O.V., Mekhedov S.L., Zheli Anan'ev E.V.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Hordeum vulgare (Barley).
Eukaryota; Viridiplantae; Stre
Spermatophyta; Magnoliophyta;
Triticeae; Hordeum.
                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                              EMBL; $66938; AAB28161.
InterPro; IPR002965; P_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   "[Nucleotide sequence of the barley C-hordein gene]."; Genetika 29:1070-1079(1993).
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InterPro; IPR002965; P_rich_extensn.
PRINTS; PR01217; PRICHEXTENSN.
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PRICHEXTENSN.
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/ta; Liliopsida; Poales; Poaceae; Pooidea
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4; Mismatches
                                                                                                                                                                                                                                                                                               Score 66; DB 10;
Pred. No. 3.4;
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    Q9LFR6;
01-OCT-2000
01-OCT-2000
01-MAR-2003
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01-JUN-2002
01-OCT-2002
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                                                                                                                                                                                                                                                                                                                                                                        Stapleton M., Brokstein P., Hong I., Agbayani A., Carlson J., Champe M., Chavez C., Dorsett V., Farfan D., Frise E., George R., Gonzalez M., Guarin H., Li P., Liao G., Miranda A., Mungall C.J., Nunco J., Pacleb J., Paragas V., Park S., Phouanenavong S., Wan K., Yu C., Lewis S.E., Rubin G.M., Celniker S.; Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.

EMBL; AY069301; AAL39446.1; -.
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Eukaryota; Fungi; Ascomycota; Schizosaccharomycetes;
Schizosaccharomycetales; Schizosaccharomycetaceae;
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Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
                                                                                      Q9LFR6
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PF01545; Cation_efflux; 1.
NCE 386 AA; 43089 MW; BCAC
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EMBL/GenBank/DDBJ data
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Pred. No. 4.2;
4; Mismatches
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Q9VZX4
Q9VZX4;
01-MAY-2000
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SEQUENCE
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Q8T9G4
                                                                                                                                                                                                Stapleton M., Brokstein P., Hong L., Agbayani A., Carlson J., Champe M., Chavez C., Dorsett V., Farfan D., Frise E., George R., Gonzalez M., Guarrin H., Li P., Liao G., Miranda A., Mungall C.J., Nunco J., Pacleb J., Paragas V., Park S., Phouanenavong S., Wan K Yu C., Lewis S.B., Rubin G.M., Celniker S.; Submitted (DEC-2001) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                EU Arabidopsis sequencing project Submitted (AUG-2000) to the EMBL/(EMBL; AL391146; CACO1808.1; -. InterPro; IPR001258; NHL. InterPro; IPR001412; tRNA-synt I. Pfam; PF01436; NHL; 2.
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Tabata S.
                                                                                                                                                                                                                                                                                                                   Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygo
Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
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Hypothetical protein.
SEQUENCE 733 AA; 83158 MW; B71F505
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Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Rosideurosids II; Brassicales; Brassicaceae; Arabidopsis.
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J., Mewes H.W., Rudd S
Jd (AUG-2000) to the I
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741 AA; 78400 MW;
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Rudd S., Lemcke K., Mayer K.F.X.;
the EMBL/GenBank/DDBJ databases.
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Pred. No. 7.9;
8; Mismatches
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01-OCT-2002 01-MAR-2003

(TrEMBLrel. 22, Last sequence update)
(TrEMBLrel. 23, Last annotation update)

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RA Addms M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,
RA Addms M.D., Celniker S.E., Holt R.A., Evans C.A., Golale R.F.,
RA Admanatides P.G., Scherer S.E., Holt R.A., Evans C.A., Galle R.F.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
RA Barladon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
RA Barladon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
RA Barladon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
RA Barladon R.C., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Ballew R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
RA Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
RA Burtis K.C., Busam D.A., Batler H., Cadleu E., Center A., Chandra I.,
RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA de Pablos B., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M.,
RA defablos R., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M.,
RA doson K., Doup I.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Goldek A., Gong F., Gorrell J.H., Gu Z., Galabrt W.M., Glasser K.,
RA Durbin K.J., Evangelista C.C., Ferraz C., Ferriera S., Fleischmann W.,
RA Harris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J.,
RA Harris N.L., Marvey D., Heiman T.J., Hernandez J.R., Houck J.,
RA Hostin D., Houston K.A., Howland T.J., Wei M.-H., IDseywam C.,
RA Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Mchulov G., Milshina N.V., Mobarry C., Morris J., Noshrefi A.,
RA Mchulov G., Milshina N.V., Mobarry C., Morris J., Noshrefi A.,
RA Merkulov G., Milshina N.V., Mobarry C., Murry D.M., Nelson D.L.,
RA Merkulov G., Milshina N.V., Mobarry C., Whill D., Pacleb J.M.,
RA Merkulov G., Milshina N.V., Mobarry C., While M.P., Smith T.,
RA Spier E., Spradling A.C., Stapleton M., Strong R., Nang A.H., Wang C.-Y., Nang S., Yao Q.A.,
RA Mary C., Shang R.
                                                                                                                                                                                                            Celniker S.E., Adams M.D., Kronmiller B., Wan K.H., Holt R.A.,

Revans C.A., Gocayne J.D., Amanatides P.G., Brandon R.C., Rogers Y.,

Banzon J., An H., Baldwin D., Banzon J., Beeson K.Y., Busam D.A.,

Carlson J.W., Center A., Champe M., Davenport L.B., Dietz S.M.,

Carlson J.W., Center A., Champe M., Davenport L.B., Dietz S.M.,

Dodson K., Dorsett V., Doup L.B., Doyle C., Dresnek D., Farfan D.,

Perriera S., Frise E., Galle R.F., Garg N.S., George R.A.,

Gonzalez M., Houck J., Hoskins R.A., Hostin D., Howland T.J.,

A Hollow J., Paragas V., Park S., Nelson C., Nelson K.A., Nunco J.,

Pacleb J., Paragas V., Park S., Patel S., Pfeiffer B.,

Phouanenavong S., Pittman G.S., Puri V., Richards S., Scheeler F.,

Stapleton M., Strong R., Svirskas R., Tector C., Tyler D.,

Williams S.M., Zaveri J.S., Smith H.O., Venter J.C., Rubin G.M.;

"Sequencing of Drosophila melanogaster genome.";

ubmitted (MAR-2000) to the EMBL/GenBank/DDBJ databases.
SEQUENCE FROM N.A. Misra S., Crosby M.A Hradecky P., Huang Y Tupy J.L., Bergman C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
Neoptera; Endopterygota; Diptera, Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
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Celniker S.E., Adams M.D.,
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Matthews B. Kaminker J. Berman B.,
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Bayraktaroglu L., Campbell K., Prochnik S.E., Smith C.D., lson J.W., Celniker S.E.,
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InterPro; IPR007087; Znf C2H2.
PROSITE; PS00028; ZINC FINGER C2
SEQUENCE 2252 AA; 243387 MW;
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                                                                                                                                                                                                               SEQUENCE FROM N.A.
Adams M.D., Celniker
Submitted (MAR-2000)
                                                                                                                                                                                        SEQUENCE
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1801 YNYGYHQAYSPYGMYPQQTPPPTPPP 1826
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                                                            Similarity
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                      HHRGYFQQYQPYQRYPLNYPPAYPFP
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Pred. No.
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2; Mismatches
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W; C2DCBF03EA70913C CRC64;
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Search Job tim time : completed: December 13, 2003, 03:08:41 secs

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-DB=EST -OpRT=fastap -SUFFIX=rst -MINNATCH=-0.1 -LOOPEXT=0
-UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=45
-DCCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALICN=15 -MODE=LOCAL
-OUTFMT=pto -NORM=ext -HEAPSIZE=50 -MINLEN=0 -MAXLEN=200000000
-USER=US10079754 @CGN 1 1 2810 @runat 12122003 145752 13028 -NCPU=6 -ICPU=3
-NO_MMAP -LARGEQUERY -NEG_SCORES=0 -MIT -DSPBLOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
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Maximum Match 100%
Listing first 45 summaries
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29: gb_gss2:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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ALIGNMENTS

N N	SULT 1 959043 CUS FINITION CESSION RSION	CB959043 569 bp mRNA linear EST 29-APR-2003 AGENCOURT 13665470 NIH MGC_184 Homo sapiens cDNA clone IMAGE:30353949 5', mRNA sequence. CB959043.1 GI:30215159
×	FINITION	CB999043 569 DD mRNA ilnear EST 29-API AGENCOURT 13665470 NIH MGC 184 Homo sapiens cDNA clone IMAGE:30353949 5', mRNA sequence.
.5.	CESSION	CB959043
.5.	RSION	CB959043.1 GI:30215159
.3.	YWORDS	EST.
.5.	URCE	Homo sapiens (human)
	ORGANISM	Homo sapiens
		Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleosto
	FRRENCE	Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

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                                                                                                                                                                                                                                                                                                 41 TyrGlnProTyrGlnArgTyrProLeuAsnTyrProProAlaTyr 55
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Mammalia; Eutheria;
1 (bases 1 to 845)
                                                      Homo sapiens
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AGENCOURT 13800675 NIH MGC 184 Homo sapiens
IMAGE:30352463 5', mRNA sequence.
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Plate: NDCM155 row: h column: 22
High quality sequence stop: 553.
Location/Qualifiers
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Tissue Procurement: Dr. Michael Brownstein and Dr.
cDNA Library Preparation: CLONTECH Laboratories, 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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                                                                           Homo sapiens (human)
                                                                                                                CB958207.1 GI:30214323
                                                                                                                                 CB958207
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                                                                                                                                                                                                                                                                TATCAGCCAGTTCCAGAACAACCACTA---TACCCACAACCATAC 237
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Library is oligo-dT primed and directionally cloned. cDNA
was prepared from a glandular pool of tissues from thyoid,
parathyroid, darenal, cortex and pineal gland. 5' and 3'
adaptors were used in cloning as follows: 5' adaptor
sequence: 5'-CACGGCCATTANGGCC-3' and 3' adaptor sequence:
5'-ATTCTAGAGGCCGAGCGGCCGACATG-dT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size 1.38
kb (range 0.60-3.5 kb). 15/15 colonies contained inserts
by PCR. This library was enriched for full-length clones
and was constructed by Clontech Laboratories (Palo Alto,
CA). Note: this is a NIH MGC Library."
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/lab_host="DH10B (T1 phage-resistant)"
/clone_lib="NIH_MGC_184"
/note="Organ: Pooled-Glandular; Vector: pDNR-LIB;
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/mol_type="mRNA"
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 779)
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EST.
                                                        Homo sapiens
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Location/Qualifiers
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                                                                       Homo sapiens (human)
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/mol_type="mRNA"
/db_xref="taxon:9606"
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136 TCATCTGAAGAGAAATTTTTGCGTAGAATTTGGAAGATTCGGTTATGGGTAT---GGCCCT 192
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Tissue Procurement: Dr. Michael Brownstein and Dr. Miklos Pa
CDNA Library Preparation: CLONTECH Laboratories, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC Clone distribution information can
CB987499 779 bp mRNA linear ES AGENCOURT 13565248 NIH MGC 184 Homo sapiens cDNA clone IMAGE:30325523 5', mRNA sequence.
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National Institutes of Health, Mammalian Gene Collection (MGC)
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                                                                                                                                                                                                                   //notes Torgan: Pooled Glandular; Vector: pDNR-LIB; Site 1:
SfiI (ggcasttatggc); Site 2: SfiI (ggcgcctcggcc);
Library is oligo-dT primed and directionally cloned. cDNA
was prepared from a glandular pool of tissues from thyoid,
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adaptors were used in cloning as follows: 5' adaptor
sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence:
5'-ATTCTAGAGCCGAGCGGCGACAAG-dT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size 1.38
kb (range 0.60-3.5 kb): 15/15 colonies contained inserts
by PCR. This library was enriched for full-length clones
and was constructed by Clontech Laboratories (Palo Alto,
CA). Note: this is a NIH MGC Library."

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clone_lib="NIH_MGC_184"
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 286)
                                                                Homo sapiens (human)
Homo sapiens
                                                                                                                                                                                                  AA376683 286 bp mF EST89136 Salivary gland Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
plate: NDCM131 row: h column: 12
High quality sequence stop: 315.
Location/Qualifiers
                                                                                                                                        AA376683
AA376683.1 GI:2029001
                                                                                                                                                                               statherin, mRNA sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tissue Procurement: Dr. Michael Brownstein and Dr.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDNA Library Preparation: CLONTECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can be
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Email: cgapbs-r@mail.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGAAGTTCCTTGTCTTTGCCTCATCATCGTCTCAATGGTTTCCATGAGTTGGAGCTGAT 138
                                                                                                                                                                                                                                                                                                                   TATCAGCCAGTTCCAGAACAACCACTA---TACCCACAACCATAC 237
                                                                                                                                                                                                                                                                                                                                                          TyrGlnProTyrGlnArgTyrProLeuAsnTyrProProAlaTyr 55
                                                                                                                                                                                                                                                                                                                                                                                                         TCATCTGAAGAGAATTTTGGCGTAGAATTGGAAGATTCGGTTATGGGTAT----GGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                    SerSerGluGluLysArgHisArgLysArgLysHisHisArgGlyTyrPheGlnGln 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MetLysIlePheIlePheValPheIleMetAlaLeuIleLeuAlaMetIleArgAlaAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sfil (ggccattatggcc); Site_2: Sfil (ggccgcttcggcc);
Library is oligo-dT primed and directionally cloned. cDNA
was prepared from a glandular pool of tissues from thyoid,
parathyroid, adrenal, cortex and pineal gland. 5' and 3'
adaptors were used in cloning as follows: 5' adaptor
sequence: 5'-CACGGCCATAATGGCC-3' and 3' adaptor sequence:
5'-ATTCTAGAGGCCGAGGCGGCAATG-dT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size 1.38
kb (range 0.60-3.5 kb). 15/15 colonies contained inserts
by PCR. This library was enriched for full-length clones
and was constructed by Clontech Laboratories (Palo Alto,
CA). Note: this is a NIH MGC Library."

56 a 173 c 140 g 207 t 3 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     note="Organ: Pooled-Glandular; Vector: pDNR-LIB; Site_1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         organism="Homo sapiens"
|mol_type="mRNA"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      _xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               host="DH10B (T1 phage-resistant)"
ne_lib="NIH_MGC_184"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps:
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RESULT 5
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           DEFINITION
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RS Adams, M.D., Kerlavage, A.R., Fleischmann, R.D., Fuldner, R.A., Bult, C.J., Lee, N.H., Kirkness, E.F., Weinstock, K.G., Gocayne, J.D., White, O., Sutton, G., Blake, J.A., Brandon, R.C., Man-Wai, C., Clayton, R.A., Cline, T.R., Cotton, M.D., Earle-Hughes, J., Fine, L.D., Fitzgerald, L.M., Fitzhugh, W.M., Fritchman, J.L., Geoghagen, N.S., Glodek, A., Gnehm, C.L., Hanna, M.C., Hedblom, B., Hinkle, P.S., Jr., Kelley, J.M., Kelley, J.C., Liu, L.-I., Marmaros, S.M., Merrick, J.M., Kelley, J.C., Liu, L.-I., Marmaros, S.M., Merrick, J.M., Shirley, R.F., McDonald, L.A., Nguyen, D.T., Pelligrino, S.M., Phillips, C.A., Ryder, S.E., Scott, J.L., Saudek, D.M., Shirley, R., Small, K.V., Spriggs, T.A., Utterback, T.R., Weidman, J.F., Li, Y., Bednarik, D.P., Cao, L., Cepeda, M.A., Coleman, T.A., Collins, B.J., Dimke, D., Feng, D.-F., Ferrie, A., Fischer, C., Hastings, G.A., He, W.M., Hu, J.S., Greene, J.M., Gruber, J., Hudson, P., Kim, A.K., Kozak, D.L., Kunsch, C., Hungjun, J., Li, H., Meissner, P.S., Olsen, H., Raymond, L., Wei, Y.F., Wing, J., Xu, C., Yu, G.L., Ruben, S.M., Dillion, P.J., Fannon, M.R., Rosen, C.A., Haseltine, W.A., Fields, C., Fraser, C.M. and
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AA376720 304 bp mRNA linear EST 21-
EST89178 Salivary gland Homo sapiens cDNA 5' end similar to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Email: arkerlav@tigr.org
For clone availability, additional sequence and expression
information related to this EST, please check the TIGR Human Gene
Index (http://www.tigr.org/tdb/hgi/hgi.html)
Seq primer: M13 Reverse.
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Contact: Kerlavage, AR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bioinformatics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Initial assessment of human gene diversity and expression patterns based upon 83 million nucleotides of cDNA sequence Mature 377 (6547 Suppl), 3-174 (1995)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Tel: 3018699056
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              7566098
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                                                                                                                                                                                      TyrGlnProTyrGlnArgTyrProLeuAsnTyrProProAlaTyr 55
                                                                                                                                                                                                                                             TCATCTGAAGAGAATTTTTTGCGTAGAATTTGGAAGATTCGGTTATGGGTAT---GGCCCT 173
                                                                                                                                                                                                                                                                                                  SerSerGluGluLysArgHisArgLysArgLysLysHisHisArgGlyTyrPheGlnGln 40
                                                                                                                                                                                                                                                                                                                                                      ATGAAGTTCCTTGTCTTTGCCTTCATCTTGGCTCTCATGGTTTCCATGATTGGNGCTGAT 116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            82
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            α
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /dev_stage="adult"
/clone_lib="Salivary_gland"
/note="Organ: salivary_gland;
/note="Organ: salivary_gland;
Site_1: EcoRI; Site_2: XhoI"
a 67 c 48 g 88 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="ATCC (inhost):181111"
/db_xref="taxon:9606"
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Best Local Similarity:
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RS Adams, M.D., Kerlavage, A.R., Fleischmann, R.D., Fuldner, R.A., Bult, C.J., Lee, N.H., Kirkness, E.F., Weinstock, K.G., Gocayne, J.D., White, C.J., Lee, N.H., Kirkness, E.F., Weinstock, K.G., Gocayne, J.D., White, C.J., Lee, N.H., Kirkness, E.F., Weinstock, K.G., Gocayne, J.D., White, C.J., Lee, N.H., Kirkness, E.F., Weinstock, K.G., Gocayne, J.D., Witzgerald, C.L., Redton, M.D., Earle-Hughes, J., Fine, L.D., Fitzgerald, L.M., Fitzchman, J.L., Geoghagen, N.S., Glodek, A., Gnehm, C.L., Hanna, M.C., Hedblom, E., Hinkle, P.S., Jr., Kelley, J.M., Kelley, J.C., Liu, L.-I., Marmaros, S.M., Merrick, J.M., Kelley, J.M., Kelley, J.G., Liu, L.-I., Marmaros, S.M., Merrick, J.M., Shirley, R., Fhillips, C.A., Ryder, S.E., Scott, J.L., Saudek, D.M., Shirley, R., Small, K.V., Spriggs, T.A., Utterback, T.R., Weidman, J.F., Li, Y., Bednarik, D.P., Cao, L., Cepeda, M.A., Coleman, T.A., Collins, E.J., Dinke, D., Feng, D.-F., Ferrie, A., Fischer, C., Hastings, G.A., He, W.W., Hu, J.S., Greene, J.M., Gruber, J., Hudson, P., Kim, A.K., Kozak, D.L., Kunsch, C., Hungjun, J., Li, H., Meissner, P.S., Olsen, H., Raymond, L., Wei, Y.F., Wing, J., Xu, C., Yu, G.L., Ruben, S.M., Dillion, P.J., Fannon, V.M.R., Rosen, C.A., Haseltine, W.A., Fields, C., Fraser, C.M. and
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Contact: Kerlavage, AR
Bioinformatics
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Seg primer: M13 Reverse.
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Email: arkerlav@tigr.org
For clone availability, additional sequence and expression
For related to this EST, please check the TIGR Human Gene
information related to this EST, bease check the TIGR Human Gene
Index (http://www.tigr.org/tdb/hgi/hgi/html)
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AA376720
AA376720.1 GI:2029038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 The Institute for Genomic Research 9712 Medical Center Drive, Rockville,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Venter, J.C.
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                                  SerSerGluGluLysArgHisArgLysArgLysLysHisHisArgGlyTyrPheGlnGln 40
                                                                                                 TCATCTGAAGAAATTTTTTGCGTAGAATTGGAAGATTCGGTTATGGGTAT----GGCCCT 149
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        89
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone lib="Salivary gland"
/note="Organ: salivary gland; Vector: pBluescript SK-;
Site_1: EcoRI; Site_2: XhoI"
1 72 c 50 g 93 t
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/db_xref="ATCC (inhost):181127"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          dev_stage="adult"
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Primates;
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Best Local Similarity:
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                             21 SerSerGluGluLysArgHisArgLysArgLysLysHisHisArgGlyTyrPheGlnGln 40
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (Dases 1 to 326)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)
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AGENCOURT 13784766 NIH MGC 184 Hc
IMAGE:30352370 5', mRNA sequence.
CB958892
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http://image.llnl.gov
                                                                                                         MetLysIlePheIlePheValPheIleMetAlaLeuIleLeuAlaMetIleArgAlaAsp
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    TCATCTGAAGAGAATTTTTGCGTAGAATTGGAAGATTCGGTTATGGGTAT----GCCCCT 195
                                                                                       ATGAAGTTCCTTGTCTTTGCCTTCATCTTGGCTCTCATGGTTTCCATGATTGGAGCTGAT 138
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//note=Torgan: Pooled_Glandular; Vector: pDNR-LIB; Site_1:
//note=Torgan: Pooled_Glandular Site_2: SfiI (ggcgcctcggcc);
Library is oligo-dT primed_and directionally cloned. cDNA
was prepared from a glandular pool of tissues from thyoid,
parathyroid, adrenal, cortex and pineal gland. 5' and 3'
adaptors were used in cloning as follows: 5' adaptor
sequence: 5'-CACGGCCATTATGGCC.3' and 3' adaptor sequence:
5'-ATTCTAGAGGCCGAGCAGCGGCGACATG-dT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size 1.38
kb (range 0.60-3.5 kb). 15/15 colonies contained inserts
by PCR. This library was enriched for full-length clones
and was constructed by Clontech Laboratories (Palo Alto,
CA). Note: this is a NIH MGC Library."

93 a 79 c 55 g 98 t 1 others
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/lab_host="DH10B (T1 phage-resistant)"
/clone_lib="NH_MGC 184"
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mol_type="mRNA"
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Tissue Procurement: Dr. Michael Brownstein and Dr.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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1 (bases 1 to 331)
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331 bp mRNA linear ES' AGENCOURT 13784844 NIH MGC 184 Homo sapiens cDNA clone IMAGE:30352015 5', mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Unpublished
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TCATCTGAAGAGAAATTTTTGCGTAGAATTGGAAGATTCGGTTATGGGTAT---GGCCCT 195
                       SerSerGluGluLysArgHisArgLysArgLysLysHisHisArgGlyTyrPheGlnGln
                                                                   ATGAAGTTCCTTGTCTTTGCCTTCATCTTGGCTCTCATGGTTTCCATGATTGGAGCTGAT 138
                                                                                   MetLysIlePheIlePheValPheIleMetAlaLeuIleLeuAlaMetIleArgAlaAsp 20
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quality sequence stop: 319.
Location/Qualifiers
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /clone="IMAGE:30352015"
/lab_host="DH10B (T1 phage-resistant)"
/clone_lib="NIH_MGC_184"
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|mol_type="mRNA"
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Contact: Kerlavage,
                                                                                                                                                                                                                                                                                                                                                                                                                                                            based upon
Nature 377
                                                                                                                                                                                                                                                             Index (http://www.tigr.d
Seq primer: M13 Reverse.
                                                                                                                                                                                                                                                                              For clone availability, additional sequence and expression information related to this EST, please check the TIGR Human Gene Index (http://www.tigr.org/tdb/hgi/hgi.html)
                                                                                                                                                                                                                                                                                                                                                                The Institute for Genomic Research
9712 Medical Center Drive, Rockville, MD 20850 USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Initial assessment of human gene diversity and expression patterns based upon 83 million nucleotides of cDNA sequence Mature 377 (6547 Suppl), 3-174 (1995)
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EST89151 Salivary gland Homo
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                                                                                                                                                                                                                                                                                                                                       Fax: 3018699423
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                                                                                                                /mol_type="mRNA"
/db_xref="ATCC (inhost):181115"
/db_xref="taxon:9606"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      41 TyrGlnProTyrGlnArgTyrProLeuAsnTyrProProAlaTyr 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21 SerSerGluGluLysArgHisArgLysArgLysLysHisHisArgGlyTyrPheGlnGln 40
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Michael Brownstein and Dr. Miklos Palkovits
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGENCOURT 13785438 NIH MGC_184 Homo IMAGE:30351237 5', mRNA semienco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
plate: NDCM148 row: g column: 22
High quality sequence stop: 357.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 (bases 1 to 357)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Homo sapiens (human)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CDNA Library Preparation: CLONTECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LINL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TATCAGCCAGTTCCAGAACAACCACTA---TACCCACAACCATAC 205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGAAGTTCCTTGTCTTTGCCTTCATCTTGGCTCTCATGGTTTCCATGATTGGAGCTGAT 106
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                                                                                                                                                                                            102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                                                  Sfil (ggccattatggc); Site 2: Sfil (ggccgcttggc);
Library is oligo-dT primed and directionally cloned.cDNA
was prepared from a glandular pool of tissues from thyoid,
parathyroid, adrenal, cortex and pineal gland. 5' and 3'
adaptors were used in cloning as follows: 5' adaptor
sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence:
5'-ATTCTAGAGGCCGAGCGCGACATG-dT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size 1.38
kb (range 0.60-3.5 kb). 15/15 colonies contained inserts
by CR: This library was enriched for full-length clones
and was constructed by Clonech Laboratories (Palo Alto,
CA). Note: this is a NIH MGC Library."

02 a 85 c 59 g 110 t 1 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                /lab_host="DH10B (T1 phage-resistant)"
/clone_lib="NIH_MGC 184"
/note="Organ: Pooled-Glandular; Vector: pDNR-LIB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             clone="IMAGE:30351237"
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              0.018
110.00
61.82%
49.09%
34.81%
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Conservative:
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sapiens cDNA clone
              357
27
19
2
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AA376680
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ORIGIN
              BASE COUNT
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US-10-079-754A-10 (1-58) x CB955686 (1-357)
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(CE) (Dases 1 to 426)

Adams, M.D., Kerlavsge, A.R., Fleischmann, R.D., Fuldner, R.A., Bult, C.J., Lee, N.H., Kirkness, E.F., Weinstock, K.G., Gocayne, J.D., White, O., Sutton, G., Blake, J.A., Brandon, R.C., Man-Wai, C., Clayton, R.A., Cline, T.R., Cotton, M.D., Earle-Hughes, J., Fine, L.D., Fitzgerald, L.M., Fitzhugh, W.M., Fritchman, J.L., Geoghagen, N.S., Glodek, A., Gnehm, C.L., Hanna, M.C., Hedblom, E., Hinkle, P.S., Jr., Kelley, J.M., Kelley, J.C., Liu, L.-I., Marmaros, S.M., Merrick, J.M., Moreno-Palanques, R.F., McDonald, L.A., Nguyen, D.T., Pelligrino, S.M., Moreno-Palanques, R.F., McDonald, L.A., Nguyen, D.T., Pelligrino, S.M., Phillips, C.A., Ryder, S.E., Scott, J.L., Saudek, D.M., Shirley, R., Small, K.V., Spriggs, T.A., Utterback, T.R., Weidman, J.F., Li, Y., Bednarik, D.P., Cao, L., Cepeda, M.A., Coleman, T.A., Collins, E.J., Hugs, C., Greene, J.M., Gruber, J., Hudson, P., Kim, A.K., Kozak, D.L., Kunsch, C., Hungjun, J., Li, H., Meissner, P.S., Olsen, H., Raymond, L., Wei, Y.F., Wing, J., Xu, C., Yu, G.L., Ruben, S.M., Dillion, P.J., Fannon, M.R., Rosen, C.A., Haseltine, W.A., Fields, C., Fraser, C.M. and Venter, J.C.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              136 TCATCTGAAGAGAAATTTTTGCGTAGAATTTGGAAGATTCGGTTATGGGTAT----GGCCCT 192
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7566098
Other_ESTs: EST89132 THC77891
Contact: Kerlavage, AR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Initial assessment of human gene diversity and expression patterns
based upon 83 million nucleotides of cDNA sequence
Nature 377 (6547 Suppl), 3-174 (1995)
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AA376680.1 GI:2028998
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EST89133 Salivary gland Homo
                                                                                                                                                                                                                                                                                                                                                                       For clone availability, additional sequence and expression information related to this EST, please check the TIGR Human Gene Index (http://www.tigr.org/tdb/hgi/hgi.html)
Seq primer: M13 Reverse.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fax: 3018699423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Tel: 3018699056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               The Institute for Genomic Research 9712 Medical Center Drive, Rockvil
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bioinformatics
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   128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         l: arkerlav@tigr.org
/organism="Homo sapiens"
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/db_xref="ATCC (inhost):107024"
/db_xref="caxon:9606"
/dev_stage="adult"
                                                                                                                                                                                                                                                                                                                                       Location/Qualifiers
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sapiens cDNA 5' end similar to
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REFERENCE
AUTHORS
TITLE
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Best Local Similarity:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDNA Library Preparation: CLONTECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.E. CONSORTIUM (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at:
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441 bp mRNA linear ES'
AGENCOURT 13785853 NIH MGC 184 Homo sapiens cDNA clone
IMAGE:30352366 5', mRNA sequence.
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CB957572.1 GI:30213689
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Plate: NDCM151 row: f column: 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Email: cgapbs-r@mail.nih
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Unpublished
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGAAGTTCCTTGTCTTTGCCTTCATCTTGGCTCTCATGGTTTCCATGATTGGAGCTGAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TyrGlnProTyrGlnArgTyrProLeuAsnTyrProProAlaTyr 55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (bases 1 to 441)
                     141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        quality sequence stop: 424.
Location/Qualifiers
           Sfil (ggccattatggcc); Site 2: Sfil (ggccgctcggcc);
Library is oligo-dT primed and directionally cloned. cDNA
was prepared from a glandular pool of tissues from thyoid,
parathyroid, adrenal, cortex and pineal gland. 5' and 3'
adaptors were used in cloning as follows: 5' adaptor
sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence:
5'-ATTCTACAGGCCGAGCAGGCGAGCATG-dT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size 1.38
kb (range 0.60-3.5 kb). 15/15 colonies contained inserts
by PCR. This library was enriched for full-length clones
and was constructed by Clontech Laboratories (Palo Alto,
CA). Note: this is a NIH MGC Library."

41 a 103 c 66 g 130 t 1 others
                                                                                                                                                                                                                                                                                                    /clone="IMAGE:30352366"
/lab_host="DH10B (T1 phage-resistant)"
/clone_lib="NIH_MGC_184"
/note="Organ: Pooled-Glandular; Vector: pDNR-LIB; Site_1:
                                                                                                                                                                                                                                                                                                                                                                                                 /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.0206
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REFERENCE
AUTHORS
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AA376682
LOCUS
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ORGANISM
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Best Local Similarity:
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MEDLINE
PUBMED
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

El 1 (bases 1 to 457)

I (cayne, R. D. Fitzgerald

I (c., Mannah, R.)

I (c., Mannah, R.)

I (cayne, L.)

I (cayne, 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Nature 37
96026280
                                                                                                                                                                                                                                                                                                                                                              Other_ESTs: EST8913
Contact: Kerlavage,
                               Email: arkerlav@tigr.org
For clone availability, additional sequence and expression information related to this EST, please check the TIGR Human Index (http://www.tigr.org/tdb/hgi/hgi.html)
Seq primer: M13 Reverse.
                                                                                                                                                                                                                                                                 The Institute for Genomic Research
9712 Medical Center Drive, Rockville,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Initial assessment of human gene diversity and expression patterns based upon 83 million nucleotides of cDNA sequence Nature 377 (6547 Suppl), 3-174 (1995)
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EST89135 Salivary gland Homo
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                                                                                                                                                                                                         Fax: 3018699423
                                                                                                                                                                                                                                     Tel: 3018699056
                                                                                                                                                                                                                                                                                                                                         Bioinformatics
                                                                                                                                                                                                                                                                                                                                                                                                                                           7566098
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCATCTGAAGAGAAATTTTTGCGTAGAATTGGAAGATTCGGTTATGGGTAT---GGCCCT 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGAAGTTCCTTGTCTTTGCCTTCATCTTGGCTCTCATGGTTTCCATGATTGGAGCTGAT 138
Location/Qualifiers
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34.81%
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rlavage, AR
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Matches:
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sapiens cDNA 5' end similar to
                                                                                                                                                                                                                                                                           3
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                                                                                                        Gene
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organism="Homo sapiens"

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RESULT 13
HSM075323
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DB:
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Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-079-754A-10 (1-58)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BASE COUNT
ORIGIN
                                                                                                          This is the 5' sequence of the clone insert Clone from S. Wiemann, Molecular Genome Analysis, German Canc Research Center (DKFZ); Email s.wiemann@dkfz-heidelberg.de; sequenced by GBF (National Research Centre for Biotechnology Ltd., Braunschweig/Germany) within the cDNA sequencing consortium of the German Genome Project.

No 81 sequence available.
                                Key
                                                          This clone (DKEZp688F1234) is available at the RZPD in This clone (DKEZp688F1248) is available at the RZPD in Please contact the RZPD: Ressourcenzentrum, Heubnerweg 14059 Berlin-Charlottenburg, GERMANY; Email: clone@rzpc
                                                                                                                                                                                                                                              Submitted (07-MAY-2003) to the EMBL/GenBank/DDBJ databases MIPS, Ingolstaedter Landstr.1, D-85764 Neuherberg, GERMANY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    09-MAY-2003
09-MAY-2003
source
                                                                                                                                                                                                                                                                                                 Han M.,
                                                                                                                                                                                                                                                                                                                   Bloecker H.,
                                                                                                                                                                                                                                                                                                                                                                                    Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BX485136.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       BX485136;
                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens mRNA; EST DKFZp686P12245_r1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HSM075323
                                                                                                                                                                                                                                                                                                                                    1-496
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                                                                                                                                                                                                                                                                                                   Wiemann
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCATCTGAAGAGAAATTTTTGCGTAGAATTGGAAGATTCGGTTATGGGTAT----GGCCCT 163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerSerGluGluLysArgHisArgLysArgLysHisHisArgGlyTyrPheGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MetLysIlePheIlePheValPheIleMetAlaLeuIleLeuAlaMetIleArgAlaAsp
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TyrGlnProTyrGlnArgTyrProLeuAsnTyrProProAlaTyr 55
                                                                                                                                                                                                                                                                                                                                                                                  ; Metazoa; Chordata; Craniata; Vertebrata; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                 Boecher M.,
ann S.;
                                                                                                                                                                                                                                                                                                                                                                                                                   (human)
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                                Location/Qualifiers
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/note="Organ: salivary gland;
Site 1: EcoRI; Site 2: XhoI"
100 c 70 g 150 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /mol_type="mRNA"
/db_xref="ATCC (inhost):181111"
/db_xref="taxon:9606"
/db_xref="taxon:9606"
/dev_stage="adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    75,
75,
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Last updated,
                                                                                                                                                                                                                                                                                                                                                                                                                                                  tag.
                                                                                                                                                                                                                                                                                                                   Mewes H.W.,
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Matches:
Conservative:
Mismatches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Version
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                                                                                                                                                                                                                                                                                                               В.,
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                                                                                             the RZPD in
                                                                 clone@rzpd.de
                                                                                                                                                                                                                                                                                                                 Amid
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                                                                                                                                                       Clone from S. Wiemann, Molecular Genome Analysis, German Canversearch Center (DKF2), Email s.wiemann@dkfz-heidelberg.de; sequenced by GBF (National Research Centre for Biotechnology Ltd., Braunschweig/Germany) within the cDNA sequencing consortium of the German Genome Project.
                                                                                         No s1 sequence available.
This clone (DKFZp686F04245) is available at the RZPD in Berlin.
Please contact the RZPD: Ressourcenzentrum, Heubnerweg 6,
                                                                                                                                                                                                                                                                           This is the 5' sequence of the clone insert
                                                                                                                                                                                                                                                                                                                        Submitted (07-MAY-2003) to the EMBL/GenBank/DDBJ databases MIPS, Ingolstaedter Landstr.1, D-85764 Neuherberg, GERMANY
                                                                                                                                                                                                                                                                                                                                                                                                                  Bloecker H.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa;
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09-MAY-2003
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                                                                    14059
                                                                                                                                                                                                                                                                                                                                                                                        Han M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Homo sapiens
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                                                                  Berlin-Charlottenburg,
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                                                                                                                                                                                                                                                                                                                                                                                          Wiemann
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/clone="DKFZp686F12245"
/clone lib="686 (synonym: hlcc3). Vector pSport1_Sfi;
DH10B; sites SfilA + SfilB"
/dev stage="adult"
/tissue_type="cDNA-collection"
                          Location/Qualifiers
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/mol_type="mRNA"
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                                                                       Email:
                                                                                                                                                                                                                                                                                                                      Neuherberg,
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SOURCE
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MEDLINE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Lerner, L., Costanzo, D., McElligott, K., Boozer, S., Mys.R., Whittington, J., E., Veloso, N., Klika, A., Hess, J., Cothren, K., Offenbacher, J., Danzig, J. and Ducar, M.

Creation of genome-wide protein expression libraries using random Nat. Biotechnol. 19 (5), 440-445 (2001)

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                                                                                                                                                                                                                                                                                        High
                                                                                                                                                                                                                                                                                                                                                  Athersys, Inc.
3201 Carnegie Ave, Cleveland,
Tel: 216 431 9900
Fax: 216 361 9596
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1 (Dases 1 to 517)

Harrington, J.J., Sherf, B., Rundlett, S., Jackson, P.D., Perry, R., Cain, S., Leventhal, C., Thornton, M., Ramachandran, R., Whittington, Cain, S., Leventhal, C., Thornton, M., Ramachandran, R., Whittington, Cain, S., Leventhal, C., Thornton, M., Ramachandran, R., Whittington, Cain, S., Leventhal, C., Thornton, M., Ramachandran, R., Whittington, Cain, S., Leventhal, C., Thornton, M., Ramachandran, R., Whittington, Cain, S., Leventhal, C., Thornton, M., Ramachandran, R., Whittington, Cain, S., Leventhal, C., Thornton, M., Ramachandran, R., Whittington, Cain, S., Leventhal, C., Thornton, M., Ramachandran, R., Whittington, Cain, S., Leventhal, C., Thornton, M., Ramachandran, R., Whittington, Cain, S., Leventhal, C., Thornton, M., Ramachandran, R., Whittington, Cain, S., C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens (human)
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RST7360 Athersys RAGE Library
BG188342
BG188342.1 GI:13710029
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                                                                                                                                                                                                                                                              l: scain@athersys.com
quality sequence stop:
   Location/Qualifiers
/organism="Homo sapiens"

/mol type="mRNA"

/db xref="taxon:966"

/ceIl_line="HT1080"

/clone lib="Athersys RAGE Library"

/note="See 'Creation of Genome-wide Protein Expression
Libraries using Random Activation of Gene Expression',
Nature Biotechnology, in press. Note that even though the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /db xref="taxon:9606"
/mol type="mRNA"
/organism="Homo sapiens"
/clone="DKRZp666F04245"
/clone_1bb="686 (synonym: hlcc3). Vector pSport1_Sfi; host
DH10B; sites SfiIA + SfiIB"
/dev_stage="adult"
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Pred. No. is the number of results predicted by chance to have

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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ALIGNMENTS

REFERENCE AUTHORS		ORGANISM	SOURCE	KEYWORDS	VERSION	ACCESSION		DEFINITION	Locus	AC134173/c	RESULT 1
.Bovidae; Bovinae; Bos. 1 (bases 1 to 19534) Muzny,D.M., Adams,C., Adio-Oduola,B., Ali-osman,F.R., Allen,C.,	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;	Bos taurus	Bos taurus (cow)	HTG; HTGS PHASE1; HTGS DRAFT.	AC134173.1 GI:23306007	AC134173	pieces.	Bos taurus clone RP42-254I13, WORKING DRAFT SEQUENCE, 26 unordered	AC134173 195534 bp DNA linear HTG 27-SEP-2002		

Alsbrooks, S.L., Amaratunge, H.C., Are, J.R.,

Ayele, M.,

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Delaney, K.R., Delgado, O., Denn, A.L., Ding, Y., Dinh, H.H.,
Douthwaite, K.J., Delgado, O., Denn, A.L., Ding, Y., Dinh, H.H.,
Douthwaite, K.J., Draper, H., Dugan-Rocha, S., Durbin, K.J.,
Earnhart, C., Edgar, D., Edwards, C.C., Elhaj, C., Escotto, M.,
Falls, T., Ferraguto, D., Flagg, M., Ford, J., Foster, P., Frantz, P.,
Gabisi, A., Gao, J., Garcia, A., Garner, T., Garza, N., Gill, R.,
Gorrell, J.H., Guevara, W., Gunaratne, P., Hale, S., Hamilton, K.,
Harris, C., Harris, K., Hart, M., Havlak, P., Hawes, A., Hernandez, J.,
Homei, F., Howard, S., Huber, J., Hulk, S., Hume, J., Joudah, S.,
Karlsson, E., Kelly, S., Khan, U., King, L., Korvah, J., Kovar, C.,
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Karlsson, E., Lichtarge, O., Lieu, C., Liu, J., Liu, W., Loulseged, H.,
Lozado, R.J., Lu, X., Lucier, A., Lucier, R., Luna, R., Ma, J.,
Mahsshwari, M., Mapua, P., Martin, R., Martindale, A., Martinez, E.,
Massey, E., Mawhiney, E., McLeod, M.P., Meador, M., Meryen, N.,
Moser, M., Neal, D., Newtson, J., Newtson, N., Nguyen, A., Nguyen, N.,
Nguyen, N., Nickerson, E., Nwokenkwo, S., Oguh, M., Okwuonu, G.,
Oragunye, N., Oviedo, R., Pace, A., Payton, B., Peery, J., Perez, L.,
Peters, L., Pickens, R., Primus, E., Pu, L. L., Quiles, M., Ren, Y.,
Rives, M., Svatek, A., Tabor, P., Tamerisa, A., Tamerisa, A., Tamerisa, N., Thomas, S.,
Scherer, S., Scott, G., Shen, H., Shooshtari, N., Sisson, I.,
Scherer, C., Taylor, T., Telfrod, B., Thomas, N., Thomas, S.,
Williams, G., Williamson, A., Wheczyk, R., Woden, S., Watlington, S.,
Williams, G., Williamson, A., Meczyk, R., Woden, S., Watlington, S.,
Williams, G., Williamson, A., Marten, R.,
Direct Subminston, S., Watlington, S.,
Parten, S., Shen, H., Shooshtari, N., Shoon, D.,
Weinstock, G., and Gibbs, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                         Submitted (24-SEP-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA
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Submitted (27-SEP-2002) Human Genome Sequencing Center, Department of Molecular and Human Genetics, Baylor College of Medicine, One Raylor Dlaza Houston TX 77030 HSA
                                                                                                                                                                                                                    Direct
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Worley, K.C.
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COMMENT

* NOTE: Es		Qualit	Estima	Conser	Conser	Conser	Assemb	Chemis	Chemia	Sequer		Center	Center		Contac	Web si	Center	Center		multon
* NOTE: Estimated insert size may differ from sequence length		Quality coverage: 4x in Q20 bases; sum-of-contigs estimation	Estimated insert size: 204493; sum-of-contigs estimation	Consensus quality: 192466 bases at least Q20	Consensus quality: 190257 bases at least Q30	Consensus quality: 185623 bases at least Q40	Assembly program: Phrap; version 0.990329	Chemistry: Dye-terminator Big Dye: 18% of reads	Chemistry: Dye-primer Bodipy: 82% of reads	Sequencing vector: M13;	Summary Statistics	Center clone name: RP42-254II3	Center project name: VUAE	Project Information	Contact: hgsc-help@bcm.tmc.edu	Web site: http://www.hgsc.bcm.tmc.edu/	Center code: BCM	Center: Baylor College of Medicine	Genome Center	
	Matches 1	Best Local	Query Match		ORIGIN	BASE COUNT					source	FEATURES								
	Matches 141; Conserva	Best Local Similarity	ה י			60952 a 35	/clo	<u>\</u>	/mol	/org	1.	Loca	* 166515	* 166415	* 150788	* 150688	* 138241	* 138141	* 128394	10000

Conservative 0;

23.3%; Score 141; DB 2; 100.0%; Pred. No. 2.3e-17;

Length 195534;

0,

Gaps

0

Mismatches

SE COUNT source (see http://www.hgsc.bcm.tmc.edu/docs/Genbank_draft_data.html).

NOTE: This is a 'working draft' sequence. It currently
consists of 26 contigs. The true order of the pieces
is not known and their order in this sequence record is
arbitrary. Gaps between the contigs are represented as
runs of N, but the exact sizes of the gaps are unknown.
This record will be updated with the finished sequence
as soon as it is available and the accession number will as soon as it is available be preserved. 128294 128394 138141 138241 150688 150788 166415 166515 87862 95727 95827 105055 105155 116717 116817 41957 42057 48095 48195 53215 53315 53315 58850 58950 66145 66245 73034 73034 73034 80331 80331 80333 36283 14487 17150 17250 21415 21515 21515 25172 25272 30646 30746 11003 11103 36183 14387 8311 8411 ρί /organism="Bos taurus" /mol_type="genomic DNA" /db_xref="taxon:9913" /clone="RP42-254I13" Location 105154: gap of unknown length
116716: contig of 11562 bp in 10
116816: gap of unknown length
128293: contig of 11477 bp in 10
128393: gap of unknown length
138140: contig of 9747 bp in le
138240: gap of unknown length
150687: contig of 12447 bp in 10
150787: gap of unknown length
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           cDNA Library Preparation: CLONTECH Laboratories, Inc. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Sequencing Group at the Stanford Human Center, Stanford University School of Medicine, Stanford, web site:

http://www-shgc.stanford.edu
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Direct Submission
Submitted (03-DEC-2001) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
Institute, 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Email: cgapbs-r@mail.nih.gov
Tissue Procurement: CLONTECH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
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MGC.
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1 (bases 1 to 566)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                     FYGDYGSNYLYDN"
102 c
                                                                                               /product="histatin 1"
/protein_id="AAH17835.1"
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/translation="MKFFVPALVLALMISMISADSHEKRHHGYRRKFHEKHHSHREFP
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                                                                                                                                                                        codon_start=1
                                                                                                                                                                                                         note="Vector: pDNR-LIB"
                                                                                                                                                                                                                                                                                               db_xref="taxon:9606"
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                                                                                                                               Query Match
Best Local Similarity
Matches 149; Conserv
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108
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OS Unidentified
PN JP 2001519667-A/485
PD 23-OCT-2001
PF 10-APR-1998 JP 1998
PR 10-APR-1997 US
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                                                                                                                                                                                                                                                                                                                  CC
CC
EH
FT
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                                                                                                                                                                                                                                                                                                                                                                                                                  PI MAURICE TREACY, VIKKI SPAULDING, MICHAEL J AGOSTINO C12N15/12, C12N5/10, C07K14/47, C12Q1/68, A61K38/17 CC St
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                   TATGGCTCTCATCCTAGCCATGATTAGAGCTGATTCATCTGAAGAGAGAAACGTCACAGGAA
                                                                                   GAATTTCATCTTTCATGACTGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCAT 179
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                                                                  GACTCTCCTCTTGAGTAAAAGGACTCAGCCAACTATGAAGTTTTTTGTCTTTTGCTTTAGT
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                                                                                                                                Conservative
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10-APR-1997 US 08/838821
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                                                                                                                                                                                                                                                                                             /organism='Unidentified'.
                                                                                                                                                                                                                           /organism="unidentified"
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Pred. No. 0.00015;
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Local Similarity 69.9%;
hes 95; Conservative
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  Sequence
AX588483
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Sequence 22 from Patent WO02083898.
AX588147
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                              AX588483
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                 TAGAAGAAAATTCCAT 185
                                                                                                                   ACGGAAAAAACATCAT 255
                                                                                                                                                                                                             TAGAGAGATTT 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGACTGTGGATCAAATTATCTATATGACAATTGATATCCTTAGTAATCATGGGGCATGAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACGGAAAAAACATCATAGAGGATATTTTCAACAATACCAGCCATATCAACGATATCCACT 299
                                                                                                                                                                                                                                                                                                                                        153
                 358
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ALVLALMISMISA/DS"
397. .402
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                                                                                                                                                                                                                                                                                                                                                                                                                       /translation="MKFFVFALVLALMISMISADSHEKRHHGYRRKFHEKHHSYHITL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              /codon_start=1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         note="unnamed protein product"
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80 с
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Pred. No. 0.0013;
0; Mismatches 4
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               438 bp I
WO02083898
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                                                                                                                                                                                                                                                                                           Length 438;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                            438 bp
Sequence 5 from Patent WO02094864.
AX616321
                                                                                                                                                     Bejanin, S. and Tanaka, H. Human cdnas and proteins and uses thereof Patent: WO 02094864-A 5 28-NOV-2002;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95;
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                                                                                                                                                                                                                                                    Homo sapiens (human)
                                                                                                                                                                                                                                                                                 AX616321.1 GI:28447365
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                                                      /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
/note="unnamed protein product"
/codon_start=1
/proteIn_id="CAD67625.1"
                                                                                                                          Location/Qualifiers
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|mol_type="genomic DNA"
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Pred. No. 0.
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110 CTTGGCTCTCATGATTTCCATGATTAGCGCTGATTCACATGAAAAGAGACATCATGGGTA
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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ALVLALMISMISA/DS"
80 c 60 g 145 t 2 others
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/db_xref="GI:27900157"
/translation="MKFFVFALVLALMISMISADSHEKRHHGYRRKFHEKHHSYHITL
LPLFEESSKSNANEKHYNLLYTLCFRILAFSIVT"
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38
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Sabatini, L.M. and Azen, E.A.
Histatins, a family of salivary histidine-rich proteins,
Histatins, a family of salivary histidine-rich proteins,
Histatins, a family of salivary histidine-rich proteins,
Histating, a family of salivary histidine-rich proteins,
Histating, a family of salivary historical salivary histor
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1. (bases 1 to 524)
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                                 GAATTTCATCTTTCATGACTGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCAT
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TAGAAGAAAATTCCAT 185
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                                                                                               Conservative
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/translation="MKFFVFALVLALMISMISADSHEKRHHGYRRKFHEKHHSYHITL
LPLFEESSKSNANEKHYNLLYTLCFRILAFSIVT"
                                                                                                                                                                                                                                           /gene="HIS2"
                                                                                                                                                                                                                                                                                                                                              /product="histatin 2"
/protein_id="AAA58646.1"
/db_xref="GI:292146"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol type="mRNA"
/db_xref="taxon:9606"
/tissue_type="parotid gland"
1...524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  source text: Homo sapiens parotid gland Location/Qualifiers
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Pred. No. 0.0013;
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. consortium/LLNL at: http://image.llnl.gov Series: IRAL Plate: 19 Row: o Column: 1
This clone was selected for full length sequencing because it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cDNA Library Preparation: CLONTECH Laboratories, Inc. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Institute for Systems Biology http://www.systemsbiology.org contact: amadan@systemsbiology.org Anup Madan, Rachel Dickhoff, Jessica Fahey, Stephanie Ford, Julia
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NIH-MGC Project URL: http://mgc.nci.nih.gov
Contact: MGC help desk
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: CLONTECH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Direct Submission
Submitted (02-UUL-2001) National Institutes of Health, Mammalian Sene Collection (MGC), Cancer Genomics Office, National Cancer Gene Collection (MGC), Cancer Genomics Office, National Cancer G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Primates; 1 (bases 1 to 558)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 4557652.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Strausberg, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Greene, Mark Ketteman and Anuradha Madan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Homo sapiens (human)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAAAAGAAATTCCATGAAAAGCATCATTCACA
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                                                                                                                                                                                                    187
                                                                                                                                                                                            /codon_start=1
/product="histatin 3"
/protein_id="AAH09791.1"
/db_xref="GI:14602561"
/translation="MKPFVFALILALMLSMTGADSHAKRHHGYKRKFHEKHHSHRGYR
SNYLYDN"
3 102 C 91 g 178 t
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/mol type="mkNA"

/db_xref="LocusID:3347"

/db_xref="Laxon:9606"

/clone="MGC:13578_IMAGE:4293405"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /tissue_type="Skeletal |
/clone_lib="NIH_MGC_81"
/lab_host="DH10B"
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                                        11.3%;
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Score 68.2; DB 9
Pred. No. 0.0033;
D; Mismatches 5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 (bases 1 to 542)
Dickinson, D.P., Ridall, A.L. and Levine, M.J.
Human submandibular gland statherin and basic histidine-rich
peptide are encoded by highly abundant mRNA's derived from a
ancestral sequence
                                                                                                                                                                                                                                262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Original source text: Human female submandibuar gland, cDNA to mRNA, clone pBRHSMSF988.2.
Draft entry and computer readable copy of sequence [1] kindly provided by D.P.Dickinson 21-MAR-1988.
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Mammalia; Eutheria; Primates;
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   GATA-----TTTTCAACAATACCAGCCATATCAACGATATCCACTAAATTATCCTCCTG 313
                                                                 TGATTAGAGCTGATTCATCTGAAGAGAAACGTCACAGGAAACGGAAAAAAACATCATAGAG
                                                                                                                     GGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCATTATGGCTCTCATCCTAGCCA
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                                   TGATTGGAGCTGATTCATCTGAAGAGAAATTTTTTGCGTAGAATTGGAAGATTCGGTTATG
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bp 1
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                                                                                                                                                                                                                             /product="statherin"
0 a 117 c 76 g 179 t
upstream of PstI site; chromosome
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /organism="Homo sapiens"
/mol_type="mRNA"
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/map="4q11-q13"
                                                                                                                                                                                                                                                                                                                                                                           /db_xref="GDB:G00-120-391"
/translation="MKFLVFAFILALMVSMIGADSSEEKFLRRIGRFGYGYGPYQPVP
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                                                                                                                                                                                                                                                                                                           note="statherin signal
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                                                                                                                                                                0,
                                                                                                                                                               Score 67.6; DB 9;
Pred. No. 0.0042;
0; Mismatches 84;
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complete cds
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                                                                                                                                                                    200 TGATTAGAGCTGATTCATCTGAAGAGAAACGTCACAGGAAACGGAAAAAAACATCATAGAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 552)

Sabatini,L.M., Carlock,L.R., Johnson,G.W. and Azen,E.A. cDNA cloning and chromosomal localization (4q11-13) of a gene for statherin, a regulator of calcium in saliva Am. J. Hum. Genet. 41 (6), 1048-1060 (1987)
                                                                                                                                                                                                                                                                                                                                                278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Draft entry and computer-readable sequence L.Sabatini 19-JAN-1988.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       regulatory protein;
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Original source text: Human parotid gland, cDNA to mRNA, clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens
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                                                                                         GATA-----TTTTCAACAATACCAGCCATATCAACGATATCCACTAAATTTATCCTCCTG
                                CGT---ATCCATTTCCTTAAAATGCTGCTTAGTAACTACAGGACATGATTAGAGAGATTT
                                                                                                                                      TGATTTGGAGCTGATTCATCTGAAGAGAAATTTTTTGCGTAGAATTGGAAGATTCGGTTATG
                                                                                                                                                                                                          GAACCCAGCCAACTATGAAGTTCCTTGTCTTTGCCTTCATCTTGGCTCTCATGGTTTTCCA
                                                                  172 a 122 c 78 g 180 t bp upstream of PstI site; chromosome 4q11-q13
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                                                                                                                                                                                                                                                                                                                                                           /gene="STATH"
/note="statherin signal peptide"
/note="statherin signal peptide"
                                                                                                                                                                                                                                                                                                                                                                                                                               /db_xref="GDB:G00-120-391"
/translation="mKFLVFAFILALMVSMIGADSSEEKFLRRIGRFGYGYGPYQPVP
EQPLYPQPYQPQYQQYTF"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /organism="Homo sapiens"
/mol_type="mRNA"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /proteIn_id="AAA60594.1"
/db_xref="GI:338508"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gene="STATH"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /db_xref="taxon:9606"
/map="4q11-q13"
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AK092678
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ORIGIN
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Direct Submission
Submitted (04-JUL-2002) Takao Isogai, FLJ Project(HRI Team); 2-6-7
Kazusa-Kamatari, Kisarazu, Chiba 292-0812, Japan
(E-mail:genomics@hri.co.jp, Tel:81-438-52-3975, Fax:81-438-52-3986)
NEDO human cDNA sequencing project supported by Ministry of
Economy, Trade and Industry of Japan; cDNA full insert sequencing:
Research Association for Biotechnology (RAB); cDNA library
construction: Helix Research Institute (HRI) (supported by Japan
Key Technology Center etc.); 5'- & 3'-end one pass sequencing: RAB,
HRI, and Biotechnology Center, National Institute of Technology and
Evaluation; clone selection for full insert sequencing: HRI and
RAB; annotation: HRI and RAB.
                                                                                            1083
                                            200
                                                                                                                                                                                        al Similarity
147; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Oshima,A., Takahashi-Fujii,A., Tanase,T., Imose,N., Takeuchi,K., Arita,M., Musashino,K., Yuuki,H., Hara,H., Sugiyama,T., Irie,R., Otsuki,T., Sato,H., Wakamatsu,A., Ishii,S., Yamamoto,J., Isono,Y Kawai-Hio,Y., Satto,K., Nishikawa,T., Kimura,K., Yamashita,H., Matsuo,K., Nakamura,Y., Sekine,M., Kikuchi,H., Kanda,K., Wagatsuma,M., Murakawa,K., Kanehori,K., Sugiyama,A., Kawakami,B., Suzuki,Y., Sugano,S., Nagahari,K., Masuho,Y., Nagai,K. and
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Homo sapiens (human)
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
TGATTGGAGCTGATTCATCTGAAGAGAAATTTTTGCGTAGAATTGGAAGATTCGGTTATG
                             TGATTAGAGCTGATTCATCTGAAGAGAAACGTCACAGGAAACGGAAAAAACATCATAGAG
                                                                                            GAACCCAGCCAACTATGAAGTTCCTTGTCTTTGCCTTCATCTTGGCTCTCATGGTTTCCA
                                                                                                                          GGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCATTATGGCTCTCCATCCTAGCCA
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                                                                                                                                                                                                                                                                                                             526
                                                                                                                                                                                        Conservative
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                                                                                                                                                                                                                                                                                                        /translation="MGDDSEWLKLPVDQKCEHKLWKARLSGYEEALKIFQKIKDEKSP
EWSKFIGLIKKEVTDSNAVVQLKGLEALLVYVENHVAGKTTGEVVSGVVSKVPKQPK
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LLKPIIKVLPKLFESREKAVRDEAKLIAVEIYRWIRDALRPPLQNINSVQLKELEEEW
VKLPTSAPRFTRFLRSQGELEAKLEQQQSAGGDAEGGGDDGDEVPQIDAYELLEAVEI
LSKLPKTFMTKLRQKGGKAEKKPWSL"
LSKLPKTFMTKLRQKGGKAEKKPWSL"
1 298 c 331 g 429 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /codon_start=1
/protein_id="BAC03943.1"
/db_xref="GI:21751328"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /clone="SALGL1000107"
/tlssue_type="salivary gland"
/clone_Tib="SALGL1"
/note="cloning_vector: pME18SFL3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  note="unnamed protein product"
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                                                                                                                                                                                                            11.2%;
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                                                                                                                                                                                                            Score 67.6;
Pred. No. 0.
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highly similar
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RESULT 13
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                                                                                                                               167 TAAAAGAAATTCCAT 182
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CC Toj
CC Sec
FH Kej
FT soi
                                                                                                                                                                                                                                                                                                          93;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Jacobs,K., Mccoy,J.M., Lavallie,E.R., Racie,L.A., Treacy,M., Spaulding,V. and Agostino,M.J. Secreted expressed sequence tags (sESTs) Patent: JP 2001119667-A 559 23-OCT-2001; GENETICS INSTITUTE INC
M26664.1 G
histatin 1.
                                          Human histatin 1 (HIS1) mRNA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PI MAURICE TREACY, VIKKI SPAULDING, MICHAEL J AGOSTINO PC C12N15/12, C12N5/10, C07K14/47, C12Q1/68, A61K38/17 CC Strai
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JP 2001519667-A/559.
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                                                                                                                                                                                                                                                GATTCTCCTCTTGAGTAAAAGGACTCAGCCAACTATGAAGTTTTTTTGTTTTTTGCTTTAAT 106
                                                                                                                                                                                                          TATGGCTCTCATCCTAGCCATGATTAGAGCTGATTCATCTGAAGAGAGAAACGTCACAGGAA
                                                                                                                                                           ACGGAAAAAACATCAT 255
                                                                                                                                                                                        CTTGGCTCTCATGCTTTCCATGACTGGAGCTGATTCACATGCAAAGAGACATCATGGGTA 166
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nilarity 68.4%;
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10-APR-1998 JP 1998543069
10-APR-1997 US 08/8388
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KENNETH JACOBS, JOHN M MCCOY, EDWARD R LAVALLIE, LISA A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unidentified JP 2001519667-A/559
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                                                                                                                                                                                                                                                                                                                                                                                          /organism="unidentified"
/mol_type="genomic DNA"
/db_xref="taxon:32644"
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             GI:292143
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Pred. No. 0.0059;
0; Mismatches 4
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                                     480 bp mkwa
nRNA, complete cds.
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SOURCE

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Local Similarity 59.6%;
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89246491
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Bos taurus statherin (STATH)
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Histatins, a family of salivary histidine-rich proteins, encoded by at least two loci (HIS1 and HIS2)
Biochem. Biophys. Res. Commun. 160 (2), 495-502 (1989)
2 (bases 1 to 486)
Rijnkels, M. and Rosen, J.M.
                                                Rijnkels,M., Elnitski,L., Miller,W. and Rosen,J.M. Multi-species comparative sequence analysis of the casein g cluster region: A gene domain encoding epithelial secretory
                     Unpublished
                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea
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/db_xref="GI:292144"
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/product="histatin 1"
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/db_xref="taxon:9606"
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Primates;
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histidine-rich protein.
Homo sapiens (human)
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                                                                                                         Draft entry and computer readable cop
provided by D.P.Dickinson 21-MAR-1988
                                                                                                                                                                                                                                                     Human submandibular gland statherin and peptide are encoded by highly abundant \mathfrak n
                                                                                                                                                                                                                                                                                                                               Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
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Human histidine-rich protein mRNA,
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                                                                                                                                          mRNA, clone pBRHSMSF1B8.1.
                                                                                                                                                               Original source text: Human
                                                                                                                                                                                                                    Biochem. Biophys.
                                                                                                                                                                                                                                                                                         1 (bases 1 to 491)
Dickinson, D.P., Ridall, A.L. and Levine, M.J.
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/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/map="3q21-qter"
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/codon_start=1
/product=!statherin"
/protein_id="AAN85581.1"
/db_xref="GI:27227455"
/translation="MKIFFFAPIMALMVAMIKADSSEEEHRLRFNPRFYYPNQQGGYI
                                                                                      Location/Qualifiers
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Location/Qualifiers
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/chromosome="6"
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/mol_type="mRNA"
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Search completed: December 13, 2003, 02:29:18 Job time : 2602 secs
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CC The invention discloses isolated histatin polynucleotides and polypeptides, which comprise sequences expressed in bovine. Histatins are chistidine rich and specific to the salivary secretions. They are believed to function as part of the non-immune defence system, particularly in the candidosis. Also disclosed are compositions comprising the histatin candidosis. Also disclosed are compositions comprising the histatin polypeptide or polynucleotide, and at least one component consisting of comprising the polypeptide, is useful for treating (e.g. gene therapy) a discrear in a mammal, particularly microbial or fungal infections. The consposition comprising the polynucleotide is also useful in genome mapping, physical consponder or polynucleotide is also useful for treating fungal or bacterial conspections of the oral cavity (e.g. dental caries, plaque or tartar), cavity (e.g. dental caries, plaque or tartar), cavity (e.g. dental caries, plaque or tartar), cavity candidation as expensional infections. The polypeptide or such as systemic candida infection. The polypeptide or polynucleotide is also useful for veteriary applications e.g. for creating mastitis. The sequence presented is a cDNA encoding a bovine consist in like nolypeptide.
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polypeptides, which comprise sequences expressed in bovine. Histatins are histidine rich and specific to the salivary secretions. They are believed to function as part of the non-immune defence system, particularly in the oral cavity and have promise as therapeutic agents in humans with oral candidosis. Also disclosed are compositions comprising the histatin polypeptide or polynucleotide, and at least one component consisting of physiological or pharmaceutical carriers or immunostimulants. The

The invention discloses isolated histatin polynucleotides and

Claim 1;

Page 11; 17pp; infections

English

in mammals, skin, or

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2000US-0699146
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99US-162701P.
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                                                                                                                                          Cow; gene; ss; histatin; bovine; salivary secretion; oral cavity; non-immune defence system; oral candidosis; gene therapy; microbial infection; fungal infection; dental caries; plaque; tarcystic fibrosis; systemic infection; Candida infection; mastitis; fungicide; antibacterial.
                                                                                                                                                                                                                                                                                                                         Bovine
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                                                                                       Bos taurus.
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   Location/Qualifiers 149..325
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Pred. No. 7.2e-91;
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                                                                                                                                                                                                                                                                                                                   CDNA.
                                                                                                                                                                                             osis; gene therapy;
dental caries; plaque; tartar;
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                                                                                                                                                                                                                                                                                                                                                               to function as part of the non-immune defence system, particularly in the CC oral cavity and have promise as therapeutic agents in humans with oral cavity and have promise as therapeutic agents in humans with oral CC candidosis. Also disclosed are compositions comprising the histatin CC polypeptide or polynuclectide, and at least one compositions of physiological or pharmaceutical carriers or immunostimulants. The CC histatin polynuclectide, polypeptide, or the cosmetic composition CC comprising the polypeptide, is useful for treating (e.g. gene therapy) a CC disorder in a mammal, particularly microbial or fungal infections. The CC histatin polynuclectide is also useful in genome mapping, physical CC mapping or in the positional cloning of genes. Specifically, the CC polypeptide or polynuclectide is useful for treating fungal or bacterial CC vagina, urethra, ear, skin, respiratory tract (e.g. cystic fibrosis CC caused by Pseudomonas aeruginosa), mucosa or eye, as well as for treating Systemic infections such as systemic Candida infection. The polypeptide CC or polynuclectide is also useful for veterinary applications e.g. for CC treating mastitis. The sequence presented is a cDNA encoding a bovine histatin like polypeptide.
                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 450
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22-AUG-2000;
27-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New histatin polynuclectides and polypeptides expressed in bovine tissues, useful for treating bacterial or fungal infections in mare:
e.g. infections of the oral cavity, vagina, urethra, ear or skin,
                                                                                                                                                                                                                                                                                                                                                             Sequence 585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention discloses isolated histatin polynucleotides and polypeptides, which comprise sequences expressed in bovine. Histatins are histidine rich and specific to the salivary secretions. They are believed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Glenn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 11; 17pp; English
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450; Conserv
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                        AGGATATTTTCAACAATACCAGCCATATCAACGATATCCACTAAATTATCCTCCTGCGTA
                                                                                                                                             CATGATTAGAGCTGATTCATCTGAAGAGAAACGTCACAGGAAACGGAAAAAAACATCATAG
                                                                                                                                                                                                                 CAGGACTCCACCAAATATGAAGATCTTTATCTTTATCTTCATTATGGCTCTCATCCTAGC
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                                                                        AGGATATTTTCAACAATACCAGCCATATCAACGATATCCACTAAATTATCCTCCTGCGTA
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nilarity 99.3%;
Conservative
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; 2000US-0699146.
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                                                                                                                                                                                                                                                                                    Score 448.2; DB 25;
Pred. No. 3.7e-87;
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The invention discloses isolated histatin polynucleotides and polypeptides, which comprise sequences expressed in bovine. Histatins are histidine rich and specific to the salivary secretions. They are believed to function as part of the non-immune defence system, particularly in the oral cavity and have promise as therapeutic agents in humans with oral candidosis. Also disclosed are compositions comprising the histatin polypeptide or polynucleotide, and at least one component consisting of physiological or pharmaceutical carriers or immunostimulants. The histatin polynucleotide, polypeptide, or the cosmetic composition
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fungicide;
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29-OCT-1999; 99US-1627019.
22-AUG-2000; 2000US-0644190.
27-OCT-2000; 2000US-0699146.
                                                                                                                                                                                                                                                                            Claim 1; Page 13; 17pp; English.
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29-OCT-1999; 99US-162701P.
22-AUG-2000; 2000US-0644190.
27-OCT-2000; 2000US-0699146.
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                    AGGATATTTTCAACAATACCAGCCATATCAACGATATCCACTAAATTATCCTCCTGCGTA
                                                                                                                                              CATGATTAGAGCTGATTCATCTGAAGAGAAACGTCACAGGAAAACGGAAAAAAACATCATAG
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                                                                                                                                                                                                                   CAGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCATTATGGCTCTCATCCTAGC
                                                                                                                                                                                                                                                         CTGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCATTATGGCTCTCATCCTAGC
TCCATTTCCTTAAAATGCTGCTTAGTAACTACAGGACATGATTAGAGAGATTTTTCACAA
                                                                    AGGATATTTTCAACAATACCAGCCATATCAACGATATCCACTAAATTATCCTCCTGCGTA
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                                                                                                                                                                                                                                                                                                            39.5%;
99.6%;
                                                                                                                                                                                                                                                                                                                                                                   A; 59 C;
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                                                                                                                                                                                                                                                                                                                                                                                                    sequences.
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                                                                                                                                                                                                                                                                                                              Score 238.4;
Pred. No. 3.9
                                                                                                                                                                                                                                                                                                                                                                 43 G;
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                                                                                                                                                                                                                                                                                             Mismatches
                                                                                                                                                                                                                                                                                                                                                                   76 T; 0 other;
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RESULT 6 ABX11390

Query Match
Best Local Similarity
Matches 121; Conserv

Conservative

0

Score 115; DB 2 Pred. No. 1.6e-1 0; Mismatches

10; Indels

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Gaps

0

Length 869;

19.0%;

Sequence

869

₿₽;

282 A; 157

C; 147 G; 283

1; 0 25;

other;

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CC polypeptides, which comprise sequences expressed in bovine. Histatins are CC histidine rich and specific to the salivary secretions. They are believed to function as part of the non-immune defence system, particularly in the CC oral cavity and have promise as therapeutic agents in humans with oral CC candidosis. Also disclosed are compositions comprising the histatin polypucleotide, and at least one compositions the polypucleotide, and at least one component consisting of CC physiological or pharmaceutical carriers or immunostimulants. The CC histatin polypucleotide, polypeptide, or the cosmetic composition CC comprising the polypeptide, is useful for treating (e.g. gene therapy) a CC disorder in a mammal, particularly microbial or fungal infections. The CC histatin polymucleotide is also useful for treating fungal or bacterial compositions or in the positional cloning of genes. Specifically, the CC vagina, urethra, ear, skin, respiratory tract (e.g. cystic fibrosis CC caused by pseudomonas aeruginosa), mucosa or eye, as well as for treating CC systemic infections such as systemic Candida infection. The polypeptide cor polypucleotide is also useful for veterinary applications e.g. for creating mastitis. The sequence presented is a cDNA encoding a bovine histatin like polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New histatin polynucleotides and polypeptides expressed in bovine tissues, useful for treating bacterial or fungal infections in mare. infections of the oral cavity, vagina, urethra, ear or skin,
                                                                                                                                                                                                                                                                                                                                                                                          The invention discloses isolated histatin polynucleotides and
                                                                                                                                                                                                                                                                                                                                                                                                                                 Claim 1; Page 12; 17pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Glenn M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cow, gene, ss, histatin, bovine, salivary secretion, oral cavity, non-immune defence system, oral candidosis, gene therapy, microbial infection, fungal infection, dental caries; plaque, tartar, cystic fibrosis, systemic infection; Candida infection; mastitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       systemic
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27-OCT-2000;
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29-OCT-1999;
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2000US-0699146.
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99US-162701P.
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72..284
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 The invention discloses isolated histatin polynucleotides and polypeptides, which comprise sequences expressed in bovine. Histatins are histidine rich and specific to the salivary secretions. They are believed to function as part of the non-immune defence system, particularly in the oral cavity and have promise as therapeutic agents in humans with oral candidosis. Also disclosed are compositions comprising the histatin polypeptide or polynucleotide, and at least one component consisting of physiological or pharmaceutical carriers or immunostimulants. The histatin polynucleotide, polypeptide, or the cosmetic composition
                                                                                                                                   Claim
                                                                                                                                                                        New histatin polynucleotides and polypeptides expressed in bovine tissues, useful for treating bacterial or fungal infections in mare e.g. infections of the oral cavity, vagina, urethra, ear or skin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   non-immune defence system; oral candidosis; gene therapy; microbial infection; fungal infection; dental caries; plaque; tartar; cystic fibrosis; systemic infection; Candida infection; mastitis;
                                                                                                                                                                                                                               WPI; 2003-275306/27.
P-PSDB; ABG75795.
                                                                                                                                                                                                                                                                                                                        23-AUG-1999; 99US-150330P.
20001-1999; 99US-1627019.
22-AUG-2000; 2000US-0644190.
27-OCT-2000; 2000US-0699146.
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disorder in a mammal, particularly microbial or fungal infections. The histatin polynucleotide is also useful in genome mapping, physical mapping or in the positional cloning of genes. Specifically, the polypeptide or polynucleotide is useful for treating fungal or bacterial infections of the oral cavity (e.g. dental caries, plaque or tartar), vagina, urethra, ear, skin, respiratory tract (e.g. cystic fibrosis caused by Pseudomonas aeruginosa), mucosa or eye, as well as for treating systemic infections such as systemic Candida infection. The polypeptide or polynucleotide is also useful for veterinary applications e.g. for treating mastitis. The sequence presented is a cDNA encoding a bovine histatin like polypeptide.
                                                                                                                                                                                                                                                                                                                                                  comprising the polypeptide,
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Query Match
Best Local S
Matches 90
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1.1e-09;

밁 S 265 ب TTTCAACAATACCAGCCATATCAACGATATCCACTAAATTATCCTCCTGCGTATCCATTT TTTCAACAATACCAGCCATATGAACGATATCCACTAAATTATCCTCCTGCGTATCCATTA 60

325 61 CCTTAAAATGCTGCTTAGTAACTACAGGACATGAT TCTTAAAATGCTGCTTACCAACTACAGGACATGAT 95

밁 Ş

AAV89526 standard; CDNA; 357

AAV89526;

15-FEB-1999 (first

EST clone CP294

receptor; ligand; thrombolytic; therapy; ss. secreted protein; expressed sequence tag; EST; haematopoiesis; growth; activin; inhibin; chemotaxis; chemokinesis; haemostatic; anti-inflammatory; cadherin; anti-tumour;

Homo sapiens.

15-OCT-1998.

10-APR-1998;

98WO-US06955.

10-APR-1997; 97US-0838821.

(GEMY) GENETICS INST INC.

Agostino I Racie LA, MJ, Jacobs , Spaulding Lavallie ER, Treacy M; McCoy ž,

1999-070077/06

New polynucleotides encoding human secreted proteins e.g. human blood, kidney, foetal lung, placenta, test ovary, pituitary, retina and colon cDNA libraries. testes, ï derived

Claim 1; Page 245; 618pp; English

ANUB9526
ANUB9526
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ANUBPS
ANUB The polynuclectide, which is a secreted EST, and the encoded protein are predicted to have useful biological activities which would make them suitable for treating, preventing or ameliorating medical conditions in humans and animals, although no supporting data is given. Suggested activities include nutritional activity, immune stimulating or suppressing activity, haematopoiesis recularion.

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\begin{array}{c} C\times S\times S+1 + P\times S+1 \times S+
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                                                                        Claim 1;
                                                                                                                                          composition for treating assays to quantitatively biological samples -
                                                                                                                                                                                                                                                                                                                        P-PSDB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 25-MAY-2001; 2001US-293574P.
15-JUN-2001; 2001US-29869B9.
29-JUN-2001; 2001US-302277P.
13-JUL-2001; 2001US-305456P.
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                                                                                                                                                                          GENSET polynucleotides and polypeptides, useful position for treating GENSET-related disorders and ays to quantitatively determined levels of GENSET
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No. 4.3e-07
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GENSET-related disorders, such as heavy metal toxicity, cancer, inflammatory diseases, immune disorders, and the neuromuscular, central nervous system (CNS), cardiovascular or gastrointestinal effects of the
                                                    The present invention relates to novel GENSET polynucleotides (ABZ36404-ABZ36911) encoding polypeptides (ABP75963-ABP76368). The polynucleotides and polypeptides are useful in screening and diagnostic assays for abnormal GENSET expression and/or biological activity. They are also useful for screening of compounds for treating or preventing are also useful for screening of compounds for treating or preventing GENSET-related disorders, such as heavy metal toxicity, cancer,
                                                                                                                                                                                                                                                                                                                                    New GENSET polynucleotides and polypeptides, useful for treating heavy metal toxicity, cancer, inflammatory diseases, immune disorders, and the neuromuscular, CNS, cardiovascular or gastrointestinal effects of
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                                                                                                                                                                                                                                                      Claim 12; Page 295; 735pp;
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                                 The present invention relates to novel GENSET polynucleotides (ABZ36404-ABZ36911) encoding polypeptides (ABP7563-ABP76368). The polynucleotides and polypeptides are useful in screening and diagnostic assays for abnormal GENSET expression and/or biological activity. They are also useful for screening of compounds for treating or preventing GENSET-related disorders, such as heavy metal toxicity, cancer, inflammatory diseases, immune disorders, and the neuromuscular, central nervous system (CNS), cardiovascular or gastrointestinal effects of the toxicity. The polynucleotides are useful for constructing or expanding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Cytostatic; antiinflammatory; nootropic; neuroprotective; cardiant; gastrointestinal; gene therapy; GENSET; heavy metal toxicity; cance inflammatory disease; immune disorder; neuromuscular; toxicity; central nervous system; cardiovascular; gastrointestinal; gene; ss.
                                                                                                                                                                                                                            New GENSET polynucleotides and polypeptides, useful for treating heavy metal toxicity, cancer, inflammatory diseases, immune disorders, and
                                                                                                                                                                         Claim 12;
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                          chromosome maps.
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                                                                                                                                                                                                                                                                                                                       (GEST ) GENSET.
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RESULT 12
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ID AAH98658
ID AAH98658
AC AAH98
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                                                                 The present invention provides the protein and coding sequences of novel proteins from a variety of organisms, including human, dog, cat, horse, cow, pig, hamster, monkey, macaque, yeast, bacteria, fruit fly, sea urchin and tomato. These were derived from expressed sequence tags (ESTs: from the organism of interest. They can be used in diagnostics, forensics, gene mapping, identification of mutations, to assess biodiversity and for nutritional purposes. The present sequence is a cDNi biodiversity and for nutritional purposes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-JAN-2000; 2000US-0491404.
17-JUL-2000; 2000US-0617746.
03-AUG-2000; 2000US-0631451.
15-SEP-2000; 2000US-0663870.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human; sheep; pig; cow; fruit fly; yeast; hamster; macaque; tomato; monkey; dog; sea urchin; expressed sequence tag; EST diagnostics; forensic test; gene mapping; genetic disorder; biodiversity; gene therapy; nutrition; ss.
                                                  of the
                                                                                                                                                                                                                                                             Claim
                                                                                                                                                                                                                                                                                                        Isolated polypeptide for treatment antibodies and research use -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Tang YT,
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                                                                         The present invention relates to human lysine-rich statherin protein (LRSP) (AAY94526). The cDNA sequence encoding this protein was identified through analysis of a cDNA library of breast tumour tissue (BRSTNOT14). The LRSP sequence was found to have homology with the DNA of human statherin (the present sequence) and human basic histidine-rich protein (AAY94528). Human statherin is a phosphorotein that acts as an inhibitor of precipitation of calcium phosphate salts in the oral cavity. The LRSP polypeptide and its antagonists may be useful for treating or preventing disorders associated with the activity of LRSP. Such disorders include autoimmune/inflammatory disorders (for example AIDS, allergies, asthma, diabetes mellitus), bacterial and fungal infection and cancers (such as leukemia, adenotaroimma, melanoma). Antibodies to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lysine-rich statherin protein; LRSP; acidic phosphoprotein; human; precipitation inhibitor; autoimmune; inflammatory disorder; AIDS; asthma; allergy; diabetes mellitus; fungal; bacterial infection;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Purified polypeptide used for treating or preventing a disorder characterized by expression or activity of lysine-rich statherin
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Query Match

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                     The present sequence represents a human expressed sequence tag (EST). The polynucleotide, which is a secreted EST, and the encoded protein are predicted to have useful biological activities which would make conditions in humans and animals, although no supporting data is given. Suggested activities include nutritional activity, immune stimulating or suppressing activity, haematopoiesis regulating activity, tissue growth activity, activin/inhibin activity, chemotactic/chemokinetic activity, activin/inhibin activity, cadherin/tumour invasion suppressor activity, tumour invasion suppressor activity, tumour inhibition activity, and activity, the polynucleotide may also be useful for gene therapy.
                                                                                                                                                                                                                                                                                                                                     Agostino N
Racie LA,
                                                                                                                                                                                                                                              New polynucleotides encoding human secreted proteins - derived e.g. human blood, kidney, foetal lung, placenta, testes, brain, ovary, pituitary, retina and colon cDNA libraries.
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                                                                                                                                                                                                                  Claim 1; Page 269-270; 618pp; English.
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                                                                                                                                                                                                                                                                                                                                  MJ, Jacobs K,
Spaulding V,
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atory; cadherin; anti-tumour;
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Best Local Query Match

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           The present invention relates to human lysine-rich statherin protein (LRSP) (AAY94526). The CDNA sequence encoding this protein was identified through analysis of a CDNA library of breast tumour tissue (BRSTNOT14). The LRSP sequence was found to have homology with human statherin protein (AAY94527) and human basic histidine-rich protein (the present sequence). Human statherin is a phosphoprotein that acts as an inhibitor of precipitation of calcium phosphate salts in the oral cavity. The LRSP polypeptide and its antagonists may be useful for treating or preventing disorders associated with the activity of LRSP. Such disorders include autoimmune/inflammatory disorders (TRSP. Such disorders, asthma, diabetes mellitus), bacterial and fungal infection and cancers (such as leukemia, adenocarcinoma, melanoma). Antibodies to LRSP may be useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Lysine-rich statherin protein; LRSP; acidic phosphoprotein; huma: precipitation inhibitor; autoimmune; inflammatory disorder; AIDS asthma; allergy; diabetes mellitus; fungal; bacterial infection; cancer; leukemia; adenocarcinoma; melanoma; ds.
                                                                                                                                                                                                                                                                       Purified polypeptide used for treating or preventing a disorder characterized by expression or activity of lysine-rich statherin
                                                                                                                                                                                                                                                                                                                      WPI; 2000-350699/30.
P-PSDB; AAY94528.
                                                                                                                                                                                                                         Disclosure; Page 72; 75pp; English.
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	•	Seguence	Sequence	Sequence 146	<pre>Sequence 1,</pre>	l Sequence 1,	Sequence 1,	Sequence 1,	Sequence 13	Sequence 1,	Seguence 3,	Sequence 18	Sequence 1,	Sequence 16,	_				

ALIGNMENTS

RESULT 1 US-09-468-265-4

Sequence 4, Application Patent No. 6379928

US/09468265

APPLICANT: Berka, Randy M APPLICANT: Cullen, Danie

INFORMATION:

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APPLICANT: Layenga, Kirk J
APPLICANT: Layenga, Kirk J
TITLE OF INVENTION: Heterologous Polypeptides Expressed in Filamentous Fungi, Process
TITLE OF INVENTION: Making Same and Vectors for Making Same
FILE REFERENCE: A-42909-5
CURRENT APPLICATION NUMBER: US/09/468,265
CURRENT FILING DATE: 1999-12-10
PRIOR APPLICATION NUMBER: 08/484,384
PRIOR APPLICATION NUMBER: 08/284,942
PRIOR APPLICATION NUMBER: 08/284,942
PRIOR FILING DATE: 1994-08-02
PRIOR APPLICATION NUMBER: 07/413,010
PRIOR APPLICATION NUMBER: 07/413,010
PRIOR APPLICATION NUMBER: 07/163,219
PRIOR APPLICATION NUMBER: 07/163,219
PRIOR APPLICATION NUMBER: 06/82,224
PRIOR FILING DATE: 1988-02-26
PRIOR APPLICATION NUMBER: 06/82,224
PRIOR APPLICATION NUMBER: 06/82,224
PRIOR FILING DATE: 1985-08-29
NUMBER: DATE: 1985-08-29
NUMBER: OF SEQ ID NOS: 28
SOFTWARRE: DATE: 1985-08-29
NUMBER: OF SEQ ID NOS: 28
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; TYPE: DNA
; ORGANISM: Emericella nidulans
US-09-468-265-4

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Best Local S
Matches 136
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SEQ ID NO 4
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AAGAATTTAATTAATTAAATTAAATATATAAATATAGTTGACCTTGAAACTGTTACTAAA
                                                                                  AACTGAATAATATTAAAGAATAGTATTATCTAAGTATAACTTAAATCTTAGTAATACTA
                                                                                                                                                                    AAGATATACTAGCCAGGGTAGACAATAATTAACTTAAAATATATAAAAAATAGCTACTAA
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                                        AGTAACTACAGGACATGATTAGAGAGATTTTTCACAATGATTTTTCCTACTCTTTCTGTT
                                                                                                                          CATATCAACGATATCCACTAAATTATCCTCCTGCGTATCCATTTCCTTAAAATGCTGCTT
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US-08-981-803-29/c
Sequence 29, Application US/08981803
Patent No. 6147279
GENERAL INFORMATION:
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US-09-367-895-29
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PRIOR APPLICATION NUMBER: PCT/IB98/00270
PRIOR FILING DATE: 1998-02-23
PRIOR APPLICATION NUMBER: GB/9703663.6
PRIOR APPLICATION NUMBER: GB/9706060.2
PRIOR PILING DATE: 1997-02-21
PRIOR APPLICATION NUMBER: GB/9706060.2
PRIOR FILING DATE: 1997-03-24
NUMBER OF SEQ ID NOS: 43
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Patent No. 6483009
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Best Local &
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            APPLICANT: POULSEN, PETER
TITLE OF INVENTION: INHIBITION OF GENE EXPRESSION
FILE REFERENCE: 674509-2004
CURRENT APPLICATION NUMBER: US/08/981,803
CURRENT FILING DATE: 1997-04-17
CURRENT FILING DATE: 1997-04-17
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TITLE OF INVENTION: ANTISENSE INTRON INHIBITION OF STARCH BRANCHING ENZYME
TITLE OF INVENTION: EXPRESSION
FILE REFERENCE: 078883/0112
  EARLIER APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Solanum tuberosum FEATURE: NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
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NUMBER: PCT/EP96/03052
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Pred. No. 1.1;
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; LENGTH: 11478
; TYPE: DNA
; ORGANISM: Solanum tuberosum
US-08-981-803-29
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; SEQ ID NO 29
; LENGTH: 11478
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EARLIER APPLICATION NUMBER: 9514435.8
EARLIER FILING DATE: 1995-07-14
NUMBER OF SEQ ID NOS: 33
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence :
Patent No
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Best Local Similarity
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CURRENT FILING DATE: 1998-04-17
EARLIER APPLICATION NUMBER: 9514437.4
EARLIER FILING DATE: 1995-07-14
                                                                                                                                                                                                                                                                                                                                                                                             EARLIER APPLICATION NUMBER: PCT EARLIER FILING DATE: 1996-07-12 NUMBER OF SEQ ID NOS: 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: POULSEN, Peter TITLE OF INVENTION: INHIBIT FILE REFERENCE: 674509-2003
NAME/KEY: variation
LOCATION: (1)..(11478)
OTHER INFORMATION: M stands
                                                            NAME/KEY: variation
LOCATION: (1)..(11478)
OTHER INFORMATION: W s
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LOCATION: (1)..(11478)
OTHER INFORMATION: R stands
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LOCATION: (1)..(11478)
OTHER INFORMATION: B stands
                                                                                                                         NAME/KEY: variation
LOCATION: (1)..(11478)
OTHER INFORMATION: K stands
                                                                                                                                                                                                                                                                                                               ORGANISM: Solanum tuberosum
                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
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; PATENT W. 5496550
; PATENT WALLACH, MICHAEL; PUGATSCH, THEA; MENCHER, D.
; APPLICANT: WALLACH, MICHAEL; PUGATSCH, THEA; MENCHER, D.
; TITLE OF INVENTION: METHOD OF REDUCING THE OUTPUT OF
;OOCYSTS FROM A NEWBORN CHICK
NUMBER OF SEQUENCES: 10
; CURRENT APPLICATION DATA:
; APPLICATION UMMBER: US/08/108,763
; FILING DATE: 17-AUG-1993
; PRIOR APPLICATION DATA:
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5496550-9
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APPLICANT: DAUBERSIES, PIERRE
APPLICANT: DAUBERSIES, PIERRE
TITLE OF INVENTION: MALARIAL PRE-ERYTHROCYTIC
FILE REFERENCE: 0660-0125-0 PCT
CURRENT APPLICATION NUMBER: US/08/973,462B
CURRENT FILING DATE: 1998-02-06.
EARLIER APPLICATION NUMBER: PCT/FR96/00894
EARLIER APPLICATION DATE: 1996-06-12
EARLIER APPLICATION NUMBER: PCT/FR96/00097
EARLIER FILING DATE: 1995-06-13
NUMBER: OF SEQ ID NOS: 29
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US-08-973-462-1
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Best Local :
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LENGTH: 6152
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA ORGANISM: P. falciparum -08-973-462-1
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Best Local
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Pred. No. 1
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Pred. No. 1.1;
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 Length 11478;

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APPLICANT: WALLACH, MICHAEL, PUGATSCH, THEA; MENCHER, D
TITLE OF INVENTION: METHOD OF REDUCING THE OUTPUT OF
COCYSIS FROM A NEWBORN CHICK
NUMBER OF SEQUENCES: 10
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/108,763
FILING DATE: 17-AUG-1993
PRIOR APPLICATION DATA:
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5496550-7
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APPLICATION NUMBER: 896,611
FILING DATE: 14-AUG-1986
(SEQ ID NO:7:
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Best Local Similarity
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APPLICATION NUMBER: 310,603
FILING DATE: 14-FEB-1989
APPLICATION NUMBER: 155,245
FILING DATE: 12-FEB-1988
APPLICATION NUMBER: 896,611
FILING DATE: 14-AUG-1986
ID NO'9'
                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 642,219
FILING DATE: 16-JAN-1991
APPLICATION NUMBER: 310,603
FILING DATE: 14-FEB-1989
APPLICATION NUMBER: 155,245
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  270
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                                                                                                                                                                       92;
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92; Conservative
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                                                      AATAAAACAAAGAAAAAAATCAGTCAAGTAGTTGCACAACACATACTTGGAATCAAAT 484
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RESULT 8 US-08-973-462-1/c Sequence 1, Application US/08973462B ; Patent No. 6191270

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APPLICANT: DRUILHE, PIERRE
APPLICANT: DRUILHE, PIERRE
APPLICANT: DRUIBERSIES, PIERRE
APPLICANT: DRUBERSIES, PIERRE
FILE OF INVENTION: MALARIAL PRE-ERYTHROCYTIC STAGE POLYPEPTIDE MOLECULES
FILE REFERENCE: 0660-0125-0 PCT
CURRENT APPLICATION NUMBER: US/08/973,462B
CURRENT FILLING DATE: 1998-02-06
EARLIER APPLICATION NUMBER: PCT/FR96/00894
EARLIER FILING DATE: 1996-06-12
EARLIER FILING DATE: 1995-06-13
NUMBER OF SEO ID NOMER: FR 95/07007
EARLIER FILING DATE: 1995-06-13
NUMBER OF SEO ID NOS: 29
SOFTWARE: Patentin Ver. 2.0
SEO ID NO 1
LENCTH: 6152
TYPE: DNA
ORGANISM: P. falciparum
US-08-973-462-1
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; ORGANISM: Homo sapien
US-09-702-705-214
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US-09-702-705-214/c
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                                                                                                                     Query Match
Best Local Similarity
Matches 133; Conserv
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LENGTH: 789
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APPLICANT:
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APPLICANT:
APPLICANT:
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TITLE OF INVENTION: COMPOSITIONS AND METHODS
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C14
CURRENT APPLICATION NUMBER: US/09/702,705
CURRENT FILING DATE: 2000-10-30
                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS:
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Local Similarity 56.4%;
nes 75; Conservative
323 TTCCTTAAAATGCTGCTTAGTAACTACAGGACATGATTAGAGAGATTTTTTCACAATGATT 382
                                                                                         263 ATTTTCAACAATACCAGCCATATCAACGATATCCACTAAATTATCCTCCTGCGTATCCAT 322
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5. 6504010
                                                      ATTTTCATTATTACCATCATAATCTTCATAATGAAGAATAATATGATAATGAACATCCAT
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Retter, Marc
Mannion, Jane
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Vedvick, Tom
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Lodes, Michael
                                                                                                                             Conservative
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r, Chaitanya
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                                                                                                                         Score 40; DB 4; Length 789; Pred. No. 0.91; 0; Mismatches 155; Indels
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; SOFTWARE: FastSEQ for i
; SEQ ID NO 214
; LENGTH: 789
; TYPE: DNA
; ORGANISM: Homo sapien
US-09-736-457-214
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                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
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APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: COMPOSITIONS AND METHODS TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER FILE REFERENCE: 210121.478C15
CURRENT APPLICATION NUMBER: US/09/736,457
CURRENT FILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 1864
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                                                                                                                                                                                                                                                                                                                             523
283
                                                                                                                      443
                                                                                                                                                              403
                                                                                                                                                                                                                                           463 GCACATAACCCCTTGTATCTCTTCATGAATGTTTCCTTAGGGGTAAGTTCTTAGAAGTGAA
                                                                                                                                                                                                                                                                                     323 TTCCTTAAAATGCTGCTTAGTAACTACAGGACATGATTAGAGAGATTTTTCACAATGATT
                                      283 GGTTATATAAGGTTGAACATTTCTTTGTCTATATTGACTTTGTAATCT 236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               503 AATAATGATAGTCTCTGAACTATGTAATTGGTTTCTACTTTTCT 550
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        403 ATTGCTATCTTCCTCTTGACTTTCTACAAGGTCTTTAATCTTTACAAAGTTTTTGTATATT 344
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mannion, Jane
Fan, Liqun
Wang, Aijun
                                                                              GAAAAAGACAAGCTCTTATTGAACACATAGTAGGTGCAATTTACCAGCATAGGCAGAGGA
                                                                                                                                                            ATTGCTATCTTCCTCTTGACTTTCTACAAGGTCTTTAATCTTTACAAAGTTTTGTATATT 344
                                                                                                                                                                                              TTTCCTACTCTTTCTGTTGTTGAAAACCATCTTTCAAATGAATAAAACAAAGAAAAAA 442
                                                                                                                                                                                                                                                                                                                             ATTTTCATTATTACCATCATAATCTTCATAATGAAGAATAATATGATAATGAACATCCAT
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GGTTÄTÄTAÄGGTTGAACÄTTTCTTTGTCTATATTGÄCTTTGTAATCT
                                                                                                                    AAATCAGTCAAGTAGTTGCACAACACATACTTGGAATCAAATATCAATATTTTAAAACAT
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Vedvick, Tom
Carter, Darrick
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Bangur, Chaitanya
Lodes, Michael A.
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Pred. No. 0.91;
0; Mismatches 155; Indels
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RESULT 11 US-09-417-485D-7/c ; Sequence 7, Application US/09417485D ; Patent No. 6541202

GENERAL INFORMATION:

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RESULT 12
US-09-482-273-47/c
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                 EARLIER APPLICATION NUMBER: 60/092,921
EARLIER FILING DATE: 1998-07-15
EARLIER APPLICATION NUMBER: 60/092,922
EARLIER FILING DATE: 1998-07-15
EARLIER APPLICATION NUMBER: 60/092,956
                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Rosen et al.
TITLE OF INVENTION: 71 Human Secreted Proteins
FILE REFERENCE: PZ030P1
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                                                                                                                                                                                                                                                                                                                                                                                EARLIER APPLICATION NUMBER: PCT/US99/15849
EARLIER FILING DATE: 1999-07-14
                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/09/482,273
CURRENT FILING DATE: 2000-01-13
                                                                                                                                                                                                                                                      SOFTWARE: PatentIn Ver. 2.0
                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 267
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                                                                                                                                                                                                                                                                                      EARLIER FILING DATE: 1998-07-15
                                                                                                                                                                                        TYPE: DNA
ORGANISM: Homo sapiens
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LOCATION: (1)..(238
OTHER INFORMATION:
                                                                                                                                             NAME/KEY: SITE LOCATION: (574
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                                                                 OTHER INFORMATION:
                                                                                  NAME/KEY: SITE
LOCATION: (5892)
                                                                                                                 FEATURE:
                                                                                                                              OTHER INFORMATION:
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                                NAME/KEY: SITE
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 47, Application US/09482273
o. 6534631
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Metz, Anneke M.
Love, Ruschelle A.
                   (5896)
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equals a,t,g,
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Best Local Similarity
Thes 77; Conserv
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; LOCATION: (5966)
; OTHER INFORMATION:
US-09-482-273-47
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Best Local :
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APPLICANT: Metz, Anneke M.
APPLICANT: Love, Ruschelle A.
TITLE OF INVENTION: Telomerase Reverse Transcriptase
FILE REFERENCE: 47714-5009-US
CURRENT APPLICATION NUMBER: US/09/417,485D
CURRENT FILING DATE: 2002-06-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS:
SOFTWARE: Patentin Ver
                                                                                                                                                                                                                                                      OTHER INFORMATION: m at position 1821 = a or c; w at position 1837 OTHER INFORMATION: a or t. Xaa (amino acid) at position 330 = Leu OTHER INFORMATION: Ile; Xaa at position 335 = Asp or Gly.
                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA ORGANISM: Plasmodium falciparum
                                                                                                                                                                                                                                                                                                                                                   LOCATION: (834)..(7385)
OTHER INFORMATION: TERT gene
                                                                                                                                                                                                                                                                                                    NAME/KEY: unsure
LOCATION: (1821)
                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: CDS
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LOCATION: (5906)
OTHER INFORMATION:
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OTHER INFORMATION:
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7544 ATAATAGAATGTATAAAAT 7526
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                                                                                   CAGTCAAGTAGTTGCACAACACATACTTGGAATCAAATATCAATATTTTAAAACATAATA 506
                                                                                                                   ATGATAGTCTCTGAACTAT 525
                                                           Conservative
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Pred. No. 2;
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SOFTWARE: PatentIn Ver. 2.1
SQ ID NO 5
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APPLICANT: Long, David M.
APPLICANT: Metz, Anneke M.
APPLICANT: Love, Ruschelle A.
                                                                                                                                                                                                                                                                                                                                                                                                                                Patent No.
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FILE REFERENCE: 47714-5009-US
CURRENT APPLICATION NUMBER: US/09/417,485D
CURRENT FILING DATE: 2002-06-14
                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
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LOCATION: (1831)
LOCATION: (1831):
OTHER INFORMATION: m at position 1821 = a or c; w at position 1837 =
OTHER INFORMATION: a or t. Xaa (amino acid) at position 330 = Leu or
OTHER INFORMATION: Ile; Xaa at position 335 = Asp or Gly.
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LOCATION: (834)..(7385)
TOTOPHATION: TERT gene
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                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                TITLE OF INVENTION: BINDING DOMAINS FROM PLASMODIUM VIVAX
TITLE OF INVENTION: AND PLASMODIUM FALCIPARUM ERYTHROCYTE BINDING PROTEINS
NUMBER OF SEQUENCES: 45
                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                              APPLICANT:
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COMPUTER:
OPERATING
SOFTWARE:
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                                                                                                                                                                         STREET:
                                                                                                                 COUNTRY:
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72; Conserv
                                                                                                                                 T: 620 Newport Center Drive 16th Floor
Newport Beach
California
                                                                                              92660
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                                                                                                                                                                                                                                                                                                                               Sim, Kim L.
Chitnis, Chetan
Chiler, Louis H.
Miller, David S.
                                                                                                                                                                                                                                                                                    Su, Xin-z
                  IBM PC compatible
SYSTEM: PC-DOS/MS-DOS
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PatentIn Release #1.0,
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                                                                                                                                                                                                                                                                                            Thomas E.
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Version #1.25
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                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 133; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/0
FILING DATE: 10-SEP-1993
                                                                                                                                                                                                                                                                                                                                                                                            ANTI-SENSE: NO
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                                                                                                                                                                                                                                                                                                                                                                                                                      TOPOLOGY: 1i
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME: Israelsen, Ned REGISTRATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 19124 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ELEPHONE:
                                                            6464
                                                                                                                        6290 TGĀATĀTĀTĀTĀTTTATAĀTGTGTĀTTTTTACTTATTTTTTTATATATACAATAAAATT 6349
                                                                                           534
                                                                                                                                                                                                                   416 TTTCAAATGAATAAAACAAAGAAAAAAAAATCAGTCAAGTAGTTGCACAACACATACTTG
                             594 TAAAAAAAAA 604
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                                                             TTTATCATTTTTTTTTTGATGCTATATATATTATTATATAATAATAAATTATAATATATAACA 6523
                                                                                           TTTCTACTTTCTTTTCTCTGTCACTTACCATGCATGCTTAATAAATTGATCTATCAAGCA 593
                                                                                                                                                     GAATCAAATATCAATATTTTAAAACATAATA--ATGATAGTCTCTGAACTATGTAATTGG 533
ACAAAAATTAA 6534
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(619) 235-0176
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Pred. No. 3.6;
0; Mismatches 110;
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415 2

Search completed: December 13, 2003, 03:01:40 Job time : 66 secs

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Total number of hits satisfying chosen parameters:
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Listing first 45 summaries
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Copyright (c) 1993 - 2003 Compugen Ltd
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/cgn2_6/ptodata/2/pubpna/PCT_N
/cgn2_6/ptodata/2/mwhmna/PCT_N
                                                             /cgn2_6/ptodata/2/pubpna/US09B_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US09C_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US09_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US09_NEW_PUB.seq2:*
/cgn2_6/ptodata/2/pubpna/US10A_PUBCOMB.seq:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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70.4	70.4	70.4	70.4	70.4	70.4	70.4	87	115	238.4	238.4	423.4	448.2	465.4	604	Score
11.7	11.7	11.7	11.7	11.7	11.7	11.7	14.4	19.0	39.5	39.5	70.1	74.2	77.1	100.0	Query Match Length DB
438	438	438	438	438	438	438	96	869	267	267	525	585	505	604	ength 1
15	13	13	13	13	11	11	14	14	14	14	14	14	14	14	, B
US-10-000-489-5	US-10-001-142-5	US-09-999-570-5	US-10-154-678-5	US-09-992-095B-5	US-09-924-340-5	US-09-992-600A-5	US-10-079-754A-5	US-10-079-754A-3	US-10-079-623-200	US-10-079-754A-15	US-10-079-754A-6	US-10-079-754A-2	US-10-079-754A-1	US-10-079-754A-4	ID
Sequence 5, Appli	Sequence 5, Appli	Sequence 5, Appli	Sequence 5, Appli	Sequence 5, Appli	Sequence 5, Appli	Sequence 5, Appli	Sequence 5, Appli	Sequence 3, Appli	Sequence 200, App	Sequence 15, Appl	Sequence 6, Appli	ν,	Sequence 1, Appli	Sequence 4, Appli	Description

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7.6	7.6	7.6	7.6	7.7	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	8.1	8.2	8.2									9.8	9.8	9.8	9.8	11.7
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13	13	13	13	13	15	13	13	13	13	13	13	15	13	13	13	13					13			14	14	13	13	13	15
US-10-311-455-1512	US-10-240-453-210	US-10-311-455-1916	US-10-311-455-1369	US-10-311-455-1936	US-10-239-676-95	US-10-240-453-107	US-10-311-455-2214	US-09-814-353-10853	US-09-814-353-4552	US-10-240-453-236	US-10-311-455-739	US-10-172-086-19	US-10-311-455-750	US-10-311-455-2098	US-10-311-455-962	US-10-311-455-57	US-10-311-455-1451	US-10-312-841-1	US-10-311-455-271	US-10-311-455-934	US-10-312-841-2	US-10-311-455-1358	US-10-027-632-263849	US-10-027-632-263848	US-10-027-632-263847	US-10-027-632-263849	US-10-027-632-263848	US-10-027-632-263847	US-10-000-986-5
			Sequence 1369, Ap						4552		739,	19,	Sequence 750, App			Sequence 57, Appl	Sequence 1451, Ap	Sequence 1, Appli	Sequence 271, App	Sequence 934, App	Sequence 2, Appli	Sequence 1358, Ap	Sequence 263849,					26	Sequence 5, Appli

ALIGNMENTS

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US-10-079-754A-4
                                                                               Matches 604;
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SEQ ID NO 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 4, Application US/10079754A Publication No. US20020164625A1
                                                                                                       Best Local Similarity
                                                                                                                         Query Match
                                                                                                                                                                                  LENGTH: 604
TYPE: DNA
ORGANISM: Bovine
                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 60,150,330 PRIOR FILING DATE: 1999-08-23 NUMBER OF SEQ ID NOS: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILE REFERENCE: 11000.1068
CURRENT APPLICATION NUMBER: US/10/079,754A
CURRENT FILING DATE: 2002-02-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Molenaar, Adrian J.
APPLICANT: Davis, Stephen R.
TITLE OF INVENTION: Compositions Isolated from Bovine
TITLE OF INVENTION: Mammary Gland and Methods for Their Use
                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: US 09/699,146
PRIOR FILING DATE: 2000-10-27
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR FILING DATE: 1999-10-29
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR FILING DATE: 2000-08-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Glenn, Matthew
                      1 GAAGTATTTTCAGTTCTATAATAAGATCTCATAACTGATGTAATTACAAAAACAAATGAA 60
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ilarity 100.0%;
Conservative 0
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Pred. No. 4.4e-126;
                                                                                 Mismatches
                                                                                                                  Length 604;
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60
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APPLICANT: Glenn, Matthew
APPLICANT: Glenn, Matthew
APPLICANT: Glenn, Matthew
APPLICANT: Molemaar, Adrian J.
APPLICANT: Davis, Stephen R.
APPLICANT: Davis, Stephen R.
TITLE OF INVENTION: Mammary Gland and Methods for Their Use
FILE REFERENCE: 11000.1068
CURRENT APPLICATION NUMBER: US/10/079,754A
CURRENT FILING DATE: 2002-02-19
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR APPLICATION NUMBER: US 99/644,190
PRIOR APPLICATION NUMBER: US 99/644,190
PRIOR APPLICATION NUMBER: US 99/644,190
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR FILING DATE: 1999-08-23
NUMBER: FILING DATE: 1999-08-23
NUMBER: OF SEQ ID NOS: 15
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1
LENGTH: 505
Type: DNA
ORGANISM: Bovine
US-10-079-754A-1
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 Best Local Similarity
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 77.1%;
99.8%;
Score 465.4; DB Pred. No. 6e-95;
                     14;
                   Length 505;
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CURRENT APPLICATION NUMBER: US/10/079,754A
CURRENT FILING DATE: 2002-02-19
PRIOR APPLICATION NUMBER: US 09/699,146
PRIOR FILING DATE: 2000-10-27
PRIOR FILING DATE: 2000-10-27
PRIOR FILING DATE: 1999-10-29
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR FILING DATE: 2000-08-22
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR FILING DATE: 1999-08-23
PRIOR FILING DATE: 1999-08-23
NUMBER OF SEQ ID NOS: 15
SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 585
밁
                              S
                                                                                                                                          ; TYPE: DNA
; ORGANISM: Bovine
US-10-079-754A-2
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US-10-079-754A-2
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                                                                       Matches
                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 2, Application US/10079754A Publication No. US20020164625A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 466;
                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Glenn, Matthew
APPLICANT: Grigor, Murray R.
APPLICANT: Molenar, Adrian J.
APPLICANT: Molenar, Applicant: Molenar, Applicant: Davis, Stephen R.
TITLE OF INVENTION: Compositions Isolated from
TITLE OF INVENTION: Mammary Gland and Methods
FILE REFERENCE: 11000.1068
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                    138 CTGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCATTATGGCTCTCATCCTAGC
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                                                                       450;
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                                                                   Score 448.2; DB 14;
Pred. No. 4.7e-91;
0; Mismatches 3;
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                                                                                                                                                                                                                                                                    US-10-079-754A-6
                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/079,754A
CURRENT FILING DATE: 2002-02-19
PRIOR APPLICATION NUMBER: US 09/699,146
PRIOR FILING DATE: 2000-10-27
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR FILING DATE: 1999-10-29
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR FILING DATE: 2000-08-22
PRIOR APPLICATION NUMBER: US 60,150,330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 6, Application US/10079754A Publication No. US20020164625A1
                                                                                                                                                                                                                                                                                                                                     SOPTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 6
                                                                                                                                                                                                Matches 466;
                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Molenaar, Adrian J.
APPLICANT: Davis, Stephen R.
TITLE OF INVENTION: Compositions Isolated from Bovine
TITLE OF INVENTION: Mammary Gland and Methods for Their Use
FILE REFERENCE: 11000.1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Glenn, Matthew
APPLICANT: Grigor, Murray
APPLICANT: Molenaar, Adr:
APPLICANT: Davis, Stephe
                                                                                                                                                                                                                                                                                                                                                                      PRIOR FILING DATE: 1999-08-23
NUMBER OF SEQ ID NOS: 15
                                                                                                                                                                                                                                                                                  TYPE: DNA ORGANISM: Bovine
                                                                                                                                                                                                                                                                                                                   LENGTH: 525
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                                                                                                                                             CTGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCATTATGGCTCTCATCCTAGC
                                                                            AAAAAAAATCAGTCAAGTAGTTGCACAACACATACTTGGAATCAAATATCAATATTTTAA
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                                                      CATGATTAGAGCTGATTCATCTGAAGAGAAACGTCACAGGAAAACGGAAAAAACATCATGT
                                                                                                                         CAGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCATTATGGCTCTCATCCTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Grigor, Murray R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTACCATGCATGCTTAATAAATTGATCTATCAA 585
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AACATAATAATGACAGTCTCTGAACTATGTAATTGGTTTCTACTTTTCTCTGTCAC
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                                                                                                                                                                                               Conservative
                                                                                                                                                                                                           70.1%;
93.4%;
                                                                                                                                                                                             0
                                                                                                                                                                                                          Score 423.4; DB 1
Pred. No. 1.7e-85;
                                                                                                                                                                                               Mismatches
-----AGAGGATATTTTCAACAATACCAGCCATAT
                                                                                                                                                                                                                            14;
                                                                                                                                                                                               1; Indels
                                                                                                                                                                                                                            Length
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FILE REFERENCE: 11000.1068
CURRENT APPLICATION NUMBER: US/10/079,754A
CURRENT FILING DATE: 2002-02-19
PRIOR APPLICATION NUMBER: US 09/699,146
PRIOR APPLICATION NUMBER: US 09/699,146
PRIOR FILING DATE: 2000-10-27
PRIOR FILING DATE: 1999-10-29
PRIOR FILING DATE: 1999-10-29
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR APPLICATION NUMBER: US 60,163,330
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR APPLICATION NUMBER: US 60,150,330
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; ORGANISM: Bovine
US-10-079-754A-15
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US-10-079-754A-15
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Best Local Sim
Matches 239;
                                                                                                                                                                                                                                                                                                                                                    SEQ ID NO 15
LENGTH: 267
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APPLICANT: Grigor, Murray
APPLICANT: Molenaar, Adri
APPLICANT: Davis, Stepher
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SOFTWARE: FastSEQ for Windows
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                                                                                                       CATGATTAGAGCTGATTCATCTGAAGAGAAACGTCACAGGAAACGGAAAAAAACATCATAG
                                      AGGATATTTTCAACAATACCAGCCATATCAACGATATCCACTAAATTATCCTCCTGCGTA 317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Grigor, Murray R.
Molenaar, Adrian J.
Davis, Stephen R.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTAATIGGTITCTACTITCTTCTCTGTCACTTACCATGCATGCTTAATAAATTGATCT 585
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                                                                                                                                                        CAGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCATTATGGCTCTCATCCTAGC
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                                                                                                                                                                                                                          Score 238.4; DB
Pred. No. 5e-44;
D; Mismatches
                                                                                                                                                                                                                                                              DB 14;
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Gaps

197

87

147 257

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APPLICANT: Havukkala, Ilkka J.
APPLICANT: Glenn, Matthew
APPLICANT: Glenn, Murray R.
APPLICANT: Grigor, Murray R.
APPLICANT: Molenaar, Adrian J.
TITLE OF INVENTION: Compositions isolated from bovine
TITLE OF INVENTION: mammary gland and methods for their
FILE REFERENCE: 11000.104463
CURRENT APPLICATION NUMBER: US/10/079,623
CURRENT APPLICATION NUMBER: US/10/079,623
CURRENT FILING DATE: 2002-02-19
NUMBER OF SEQ ID NOS: 370
SOFTWARE: FastSEQ for Windows Version 4.0
LENGTH: 267
TYDE: NNA
APPLICANT: Grigor, Murray R.
APPLICANT: Grigor, Murray R.
APPLICANT: Molenaar, Adrian J.
APPLICANT: Molenaar, Adrian J.
APPLICANT: Davis, Stephen R.
TITLE OF INVENTION: Compositions Isolated from Bovine
TITLE OF INVENTION: Mammary Gland and Methods for Their Use
FILE REFERENCE: 11000.1068
CURRENT FILING DATE: 2002-02-19
PRIOR APPLICATION NUMBER: US 09/699.146
PRIOR APPLICATION NUMBER: US 09/699.146
PRIOR FILING DATE: 1909-10-29
PRIOR FILING DATE: 1909-10-29
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR FILING DATE: 1999-08-23
NUMBER OF SEQ ID NOS: 15
SOFTWARE: FastSEQ for Windows Version 4.0
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US-10-079-623-200
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; ORGANISM: Bovine
US-10-079-623-200
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Best Local Similarity 99.6%;
Matches 239; Conservative
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DESCRIPTION OF THE PROPERTY OF THE PR
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; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 5
; LENGTH: 96
; TYPE: DNA
; ORGANISM: Bovine
US-10-079-754A-5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: DNA
; ORGANISM: Bovine
US-10-079-754A-3
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CURRENT FILING DATE: 2002-02-19
PRIOR APPLICATION NUMBER: US 09/699,146
PRIOR FILING DATE: 2000-10-27
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR FILING DATE: 1999-10-29
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR FILING DATE: 2000-08-23
PRIOR FILING DATE: 1999-08-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 5, Application US/10079754A Publication No. US20020164625A1
                                                                                                                                         Query Match
Best Local Similarity
Matches 90; Conserv
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Best Local Similarity
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APPLICANT: Davis, Stephen R.
TITLE OF INVENTION: Compositions Isolated from
TITLE OF INVENTION: Mammary Gland and Methods
FILE REFERENCE: 11000.1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Glenn, Matthew APPLICANT: Grigor, Murray
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     138 CTGGACTCCACAAATATGAAGATCTTTATCTTTTGTCTTCATTATGGCTCTCATCCTAGC
                      325 CCTTAAAATGCTGCTTAGTAACTACAGGACATGAT 359
                                                                                          265 TTTCAACAATACCAGCCATATCAACGATATCCACTAAATTATCCTCCTGCGTATCCATTT
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61 TCTTAAAATGCTGCTTACCAACTACAGGACATGAT
                                                                       1 TTTCAACAATACCAGCCATATGAACGATATCCACTAAATTATCCTCCTGCGTATCCATTA
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94.7%;
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                                                                                                                                           Score 87; DB 14;
Pred. No. 3.5e-10;
0; Mismatches 5
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Pred. No. 4.8e-16;
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95
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                                                                                                                                             5; Indels
                                                                                                                                                                              Length 96;
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Sequence 5, Application US/09992600A Publication No. US20030027161A1

GENERAL INFORMATION:

APPLICANT: Benjanin, Stephane APPLICANT: Tanaka, Hiroaki TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF

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RESULT 10
US-09-924-340-5
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    APPLICANT: Tanaka, Hiroaki
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.US2.REG
CURRENT APPLICATION NUMBER: US/09/924,340
CURRENT FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR APPLICATION NUMBER: US 60/298,698
PRIOR FILING DATE: 2001-06-15
PRIOR FILING DATE: 2001-06-15
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PRIOR FILING DATE: 2001-08-06
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CURRENT FILING DATE: 2001-11-13
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LOCATION: 423..438
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APPLICATION NUMBER: US 60/302,277
FILING DATE: 2001-06-29
APPLICATION NUMBER: US 60/293,574
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84..317
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                                                                                                                                                                                     SOFTWARE: SEQ ID NO 5
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NUMBER OF SEQ ID NOS: 112
SOFTWARE: JPatent
SEQ ID NO 5
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                                                           TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: 5'UTR
LOCATION: 1..83
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Best Local Similarity 69.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/09/992,095B
CURRENT FILING DATE: 2003-02-20
                                                                                                                                                                                                                           PRIOR FILING DATE: 2001-0
NUMBER OF SEQ ID NOS: 112
                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR FILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR FILING DATE: 2001-06-29
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PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: PCT/IB01/01715
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Benjanin, Stephane
APPLICANT: Tanaka, Hiroaki
               NAME/KEY:
LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 2001-08-06
FEATURE:
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                                                                                                                                                                 ENGTH:
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                                                                                                                                                                                                                                           APPLICATION NUMBER: US 60/293,574 FILING DATE: 2001-05-25
                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: US 60/298,698 FILING DATE: 2001-06-15
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             CDS
84..317
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Pred. No. 3.8e-06;
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TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AN
FILE REFERENCE: 182.US1.REG
CURRENT APPLICATION NUMBER: US/10/154,678
CURRENT FILING DATE: 2002-10-15
PRIOR APPLICATION NUMBER: US 09/924,340
PRIOR FILING DATE: 2001-08-06
PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR FILING DATE: 2001-07-13
PRIOR FILING DATE: 2001-07-13
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-29
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US-10-154-678-5
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                                                                  US-10-154-678-5
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Best Local Similarity 69.9%;
Matches 95; Conservative
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQ ID NO 5
LENGTH: 4
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SOFTWARE: JPatent
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APPLICANT: Tanaka, Hiroaki
                                                                                  NAME/KEY: polyA_site
LOCATION: 423..438
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LOCATION: 423..438
                                                                                                                                                  NAME/KEY: polyA_signal LOCATION: 397..402
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LOCATION: 84..317
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LOCATION: 1..83
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LOCATION: 397..402
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LOCATION: 318..438
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Pred. No. 3.8e-06;
0; Mismatches 41
Score 70.4; DB 13; Pred. No. 3.8e-06;
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PRIOR FILING DATE: 2001-08-06
PRIOR PPLICATION NUMBER: PCT/IB01/01715
PRIOR PPLICATION NUMBER: US 60/305,456
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR PPLICATION NUMBER: US 60/302,277
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PRIOR APPLICATION NUMBER: US 60/298,698
PRIOR APPLICATION NUMBER: US 60/298,698
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SEQ ID NO 5
LENGTH: 438
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APPLICANT: Benjanin,
APPLICANT: Tanaka, 1
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TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: G-091US08DIV
CURRENT APPLICATION NUMBER: US/09/999,570
CURRENT FILING DATE: 2001-06-14
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ORGANISM: Homo sapiens
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LOCATION: 423..438
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NAME/KEY: 5'UTR
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OCATION: 84..317
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                      180 TATGGCTCTCATCCTAGCCATGATTAGAGCTGATTCATCTGAAGAGAAACGTCACAGGAA
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Pred. No. 3.8e-06;
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Sequence 5. Application US/10000489

Publication No. US20030092011A1

GENERAL INFORMATION:
APPLICANT: Benjanin, Stephane
APPLICANT: Tanaka, Hiroaki

TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.US6.DIV

CURRENT APPLICATION NUMBER: US/10/000,489

CURRENT FILING DATE: 2001-01-14

PRIOR APPLICATION NUMBER: US 09/924,340

PRIOR APPLICATION NUMBER: PCT/1B01/01715

PRIOR APPLICATION NUMBER: PCT/1B01/01715
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NAME/KEY: polyA signal
LOCATION: 397.:402
NAME/KEY: polyA site
LOCATION: 423..438
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CURRENT FILING DATE: 2001-11-14
PRIOR APPLICATION NUMBER: US 09/924,340
PRIOR FILING DATE: 2001-08-06
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TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.US7.DIV
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PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR FILING DATE: 2001-07-13
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APPLICANT: Tanaka, Hiroaki
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RIOR FILING DATE: 2001-08-06
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PRIOR FILLING DATE: 2001-07-13
PRIOR PELLCATION NUMBER: US 60/302,277
PRIOR FILLING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/298,698
PRIOR APPLICATION NUMBER: US 60/293,574
PRIOR FILLING DATE: 2001-05-25
NUMBER OF SEQ ID NOS: 112
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Best Local Similarity 69.9%;
Matches 95; Conservative
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TYPE: DNA
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Pred. No. 3.8e-06;
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B95794	B95752	B95744	B95741	95728	B95722	89568	B95686	95653	B95648	B95618	955	B98759	B98	B98641	B98628	B98518	B95	B95712	B95644	B95630	B95902	B95854	895916	B95722	B98783	B9585	95785	51.5	CB986478	000	000	3 6	7670	8717	75	07601	B9877	B98552	98447
57940	57523	957440	57414	57280	B957224	B956877	56860	56536	56487		55720	CB987595 AGENCOURT	CB987123 AGENCOURT	CB986417 AGENCOURT	CB986281 AGENCOURT	CB985184 AGENCOURT	CB957972 AGENCOURT	7121	6449	B956307	B959029	B958545	B959166	B957223	B987834	B958523	957853	85159		CETCOLCE CLOSE	70704 5510910	82524 EST9574	76700 EST8915	987175 AGENCO	85714 Homo	485825 H	B987745	985521	CB984475 AGENCOURT

ALIGNMENTS

	COMMENT	TITLE	AUTHORS	REFERENCE		ORGANISM	SOURCE	KEYWORDS	VERSION .	ACCESSION	•	DEFINITION	Locus	CB985810	RESULT 1
Email: cgapbs -r@mail.nih.gov Tissue Procurement: Dr. Michael Brownstein and Dr. Miklos Palkovits cDNA Library Preparation: CLONTECH Laboratories, Inc. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov plate: NDCM143 row: b column: 08 High quality sequence stop: 553.	Contact: Robert Strausberg, Ph.D.	National Institutes of Health, Mammalian Gene Collection (MGC)	NIH-MGC http://mgc.nci.nih.gov/.	1 (bases 1 to 553)	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;	Homo sapiens	Homo sapiens (human)	EST.	CB985810.1 GI:30280334	CB985810	IMAGE:30329983 5', mRNA sequence.	omo sapiens cDNA clo	CB985810 553 bp mRNA linear EST 01-MAY-2003		

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REFERENCE
AUTHORS
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CB957544
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found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov plate: NDCM151 row: 1 column: 17 High quality sequence stop: 546.
                                                                                                                                                                                                                         Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Michael Brownstein and Dr.
                                                                                                                                                                                                                                                                                                                     Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1 (bases 1 to 546)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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                                                                                                              cDNA Library Preparation: CLONTECH Laboratories, Inc. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                                                                                           Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                        Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa;
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/clone lib="NIH MCC 184"
/note="Organ: Pooled-Glandular; Vector: pDNR-LIB; Site_1:
SfiI (ggccattatggcc); Site_2: SfiI (ggccgctcggcc);
Library is oligo-dT primed and directionally cloned. cDNA
was prepared from a glandular pool of tissues from thyoid,
parathyroid, adrenal, cortex and pineal gland. 5' and 3'
adaptors were used in cloning as follows: 5' adaptor
sequence: 5'-CACGCCCATTATGGCC-3' and 3' adaptor sequence:
5'-ATTCTAGAGGCCGAGCGCGCAATATGGCC-3' and 3', adaptor sequence:
5'-ATTCTAGAGGCCGAGCGGCCGACATGGT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size 1.38
kb (range 0.60-3.5 kb). 15/15 colonies contained inserts
by CR. This library was enriched for full-length clones
and was constructed by Clontech Laboratories (Palo Alto,
CA). Note: this is a NIH MGC Library."
71 a 117 c 81 g 183 t 1 others
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Pred. No. 0.027;
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RESULT 3
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Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Michael Brownstein and Dr. Miklos Palkovits
cDNA Library Preparation: CLONTECH Laboratories, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
                                                                                                                                                                                                                                                                                       Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
1. (Dases 1 to 555)
                                                                                                                                                                                     Unpublished
Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens (human)
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                                                                                                                                                                                                                                            NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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Library is oligo-dT primed and directionally cloned. cDNA
was prepared from a glandular pool of tissues from thyoid,
parathyroid, adrenal, cortex and pineal gland. 5' and 3'
adaptors were used in cloning as follows: 5' adaptor
sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence:
5'-ATTCTAGAGGCCGAGCGCGCACTATGGCGCGT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size 1.38
kb (range 0.60-3.5 kb). 15/15 colonies contained inserts
by PCR. This library was enriched for full-length clones
and was constructed by Clonech Laboratories (Palo Alto,
CA). Note: this is a NIH MGC Library."

66 a 103 c 87 g 185 t lothers
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/clone_lib="NIH_MGC_184"
/note="Organ: Pooled-Glandular; Vector: pDNR-LIB; Site_1:
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/mol_type="mRNA"
/db_xref="taxon:9606"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                151;
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Michael Brownstein and Dr. Miklos Palkovits
cDNA Library Preparation: CLONTECH Laboratories, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (Dases 1 to 792)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                  CB958289 792 bp mRNA 1
AGENCOURT 13778124 NIH MGC 184 Homo sapiens
IMAGE:30352112 5', mRNĀ sequence.
                                                                                                        Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                     Homo sapiens
                                                                                                                                                                                                                                                                                                                 CB958289.1 GI:30214405
                                                                                                                                                                                                                                                                                                                                           CB958289
                                                                                                                             Unpublished
                                                                                                                                                                                                                                                                          Homo sapiens (human)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sfil (ggccattatggcc); Site_2: Sfil (ggccgcctcggcc);
Library is oligo-dT primed and directionally cloned. cDNA
was prepared from a glandular polo of tissues from thyoid,
parathyroid, adrenal, cortex and pineal gland. 5' and 3'
adaptors were used in cloning as follows: 5' adaptor
sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence:
5'-ATTCTAGAGGCCGAGGCGGCGATG-dT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size 1.38
kb (range 0.60-3.5 kb). 15/15 colonies contained inserts
by PCR. This library was enriched for full-length clones
and was constructed by Clontech Laboratories (Palo Alto,
CA). Note: this is a NIH MGC Library."

69 a 104 c 88 g 190 t 4 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /clone="IMAGE:30329446"
/lab_host="DH10B (T1 phage-resistant)"
/clone_lib="NIH_MGC_184"
/clone_"Organ: Pooled-Glandular; Vector: pDNR-LIB; Site_1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism="Homo sapiens'
/mol_type="mRNA"
/db_xref="taxon:9606"
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Pred. No. 0.08
0; Mismatches
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CB984475
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             40
Contact: Robert Strausberg, Ph.D. Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Michael H
                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Primates; 1 (bases 1 to 793)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             793 bp n
AGENCOURT 13459298 NIH MGC 184 Homo
IMAGE:30327061 5', mRNA sequence.
CB984475
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                                                                                                                                    NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection
                                                                                                             Unpublished
                                                                                                                                                                                                                                                                                                                                        Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TATAGAGGTTT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  АССБАЛЛАЛАСАТСАТАБАСБАТАТТТСРАСЛАГАССРБССАТАТСВАСБАТАТССАСТ 299
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//clone="IMAGE:3032112"
//lab host="DH10B (T1 phage-resistant)"
//clone=lib="NIH MGC 184"
//note="Organ: Pooled-Glandular; Vector: pDNR-LIB; Site_1:
//note="Organ: PDNR-LIB; Site_1: pDNR-LIB; Site_1: pDNR-LIB; Site_1:
//note="Organ: PDNR-LIB; Site_1: pDNR-LIB; Site_1: pDNR-LIB; Site_1:
//note="Organ: PDNR-LIB; Site_1: pDNR-L
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mol_type="mRNA"

db_xref="taxon:9606"
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Michael Brownstein and

Dr. Miklos Palkovits

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ACCESSION
VERSION
KEYWORDS
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CB985521
                                                                          REFERENCE
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Best Local Similarity 60.2%;
  JOURNAL.
                                                    AUTHORS
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                                                                                                                                                                                                                                                           AGENCOURT 13652179 NIH MGC_184 Homo IMAGE:30327553 5', mRNA sequence. CB985521
             Mammalia; Eutheria; Primates; Catarrhini; 1 (bases 1 to 831)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cDNA Library Preparation: CLONTECH Laboratories, Inc. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bloscience Corporation Clone distribution: MGC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
Unpublished
                                                                                                Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                             Homo
                                                                                                                                                                                                                                        CB985521.1 GI:30280045
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Plate: NDCM135 row: h column: 14
                                                                                                                                                                                   Homo sapiens (human)
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Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /lab host="NHIOB (T1 phage-resistant)"
/clone lib="NIH MCC 184"
/note="Organ: Pooled-Glandular; Vector: pDNR-LIB; Site_1:
SfiI (ggccattatggcc); Site_2: SfiI (ggccgctcggcc);
Library is oligo-dT primed and directionally cloned. cDNA
was prepared from a glandular pool of tissues from thyoid,
parathyroid, adrenal, cortex and pineal gland. 5' and 3'
adaptors were used in cloning as follows: 5' adaptor
sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence:
5'-ATTCTAGAGGCCGGCCGATCACT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size 1.38
kb (range 0.60-3.5 kb). 15/15 colonies contained inserts
by PCR. This library was enriched for full-length clones
and was constructed by Clontech Laboratories (Palo Alto,
CA). Note: this is a NIH MGC Library."

30 a 168 c 152 g 242 t 1 others
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/db_xref="taxon:9606"
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                                                                                                                                                                                                                                                                                                                                            mRNA
                                                                                                                                                                                                                                                                                                                   sapiens
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                        Gene Collection (MGC)
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s cDNA clone
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                                                                                                        ORGANISM
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                                                                                                                                                                                                                                                 CB987745
929 DP NIKWA AGENCOURT 13631497 NIH MGC 184 Homo sapiens cDNA clone IMAGE:30327757 5', mRNA sequence.
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Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Michael Brownstein and Dr. Miklos Palkovits
cDNA Library Preparation: CLONTECH Laboratories, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 929)
                                                                                                     Homo sapiens
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                                                                                                                                 Homo sapiens (human)
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High quality sequence stop: 177
Location/Qualifiers
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//lab host="DH108 (T1 phage-resistant)"
//lab host="DH108 (T1 phage-resistant)"
//clone lib="NH1 MGC 184"
//note="Organ: Pooled-Glandular; Vector: pDNR-LIB; Site_1:
//note="Organ: PDNR-LI
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Pred. No. 0.
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TITLE
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09-MAY-2003
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Michael Brownstein and Dr.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: Robert Strausberg, Ph.D.
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CDNA Library Arrayed by: The I.M.A.G.E. Consortium
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution informati
                                                                                                                                                                                                                                                             TAGAGAGATTT 370
                                                                                                                                                                                                                                                                                                    GGACTATGGATCAAATTATCTATATGACAATTGATATCCTTAGTAATCATGGGGCATGAT
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Library is oligo-dT primed and directionally cloned. cDNA
was prepared from a glandular pool of tissues from thyoid,
parathyroid, adrenal, cortex and pineal gland. 5' and 3'
adaptors were used in cloning as follows: 5' adaptor
sequence: 5'-CACGGCCATTATGGCC.-3' and 3' adaptor sequence:
5'-CATTCTAGAGGCCGAGGCGGCGATG-dT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size 1.38
kb (range 0.60-3.5 kb). 15/15 colonies contained inserts
by PCR. This library was enriched for full-length clones
and was constructed by Clontech Laboratories (Palo Alto,
CA). Note: this is a NIH MGC Library."

69 a 199 c 185 g 274 t 2 others
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//ab_host="DH10B (TI phage-resistant)"
/clone lib="NIH MGC 184"
/note="Organ: Pooled-Glandular; Vector
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Query Match
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Submitted (07-MAY-2003) to the EMBL/GenBank/DDBJ databases
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This clone (DKFZp686L09248) is available at the RZPD in Berlin.
Please contact the RZPD: Ressourcenzentrum, Heubnerweg 6,
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/clone_lib="686 (synonym: h
DH10B; sites SfiIA + SfiIB"
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A., Fobo G., 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               organism="MRNA"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                    212 T; 1 other;
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RESULT 9 HSM075901 ID HSM07

HSM075901

standard; RNA; EST;

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This clone (DKFZp686E20248) is available at the RZPD in Berlin Please contact the RZPD: Ressourcenzentrum, Heubnerweg 6, 14059 Berlin-Charlottenburg, GERMANY; Email: clone@rzpd.de
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09-MAY-2003
                                                                                                                                                                                                                                                                                                                                   Sequence 622
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                                                                                                                                                                                                                                                                                                                                                                                                          organism="Homo sapiens"
clone="DKFZp686E20248"
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/mol_type="mRNA"
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Pred. No. 0.11;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Michael Brownstein and Dr. Miklos Palkovits
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Unpublished
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National Institutes of Health, Mammalian
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CDNA Library Preparation: CLONTECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MGC clone distribution information can
                                                                                                                                                                                  TATGGCTCTCATCCTAGCCATGATTAGAGCTGATTCATCTGAAGAGAGAAACGTCACAGGAA
                                                                                                                                                                                                                                          GACTCTCCTCTTGAGTAAAAGGACTCAGCCAACTATGAAGTTTTTTGTCTTTTGCTTTAGT
                                                                                                                                                                                                                                                                            GAATTTCATCTTTCATGACTGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCAT
                                                                                                           ACGGAAAAAACATCATAGAGGATATTTTCAACAATACCAGCCATATCAACGATATCCACT
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                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                 Sfil (ggccattatggcc); Site 2: Sfil (ggccgctcggc);
Library is oligo-dT primed and directionally cloned. cDNA
was prepared from a glandular pool of tissues from thyoid,
parathyroid, adrenal, cortex and pineal gland. 5' and 3'
adaptors were used in cloning as follows: 5' adaptor
sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence:
5'-ATTCTAGAGGCCGAGGCCGACATG-dT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size 1.38
kb (range 0.60-3.5 kb). 15/15 colonies contained inserts
by PCR. This library was enriched for full-length clones
and was constructed by Clontech Laboratories (Palo Alto,
CA). Note: this is a NIH MGC Library."

27 a 163 c 159 g 223 t 1 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone="IMAGE:30329891"
/lab_host="PH10B (T1 phage-resistant)"
/clone_lib="NIH_MGC_104"
/note="Organ: Pooled-Glandular; Vector: pDNR-LIB;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Location/Qualifiers
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REFERENCE
AUTHORS
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AA376700
LOCUS
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MEDLINE
PUBMED
                                                                 Matches 150;
                                                                                    Best Local
                                                                                                    Query Match
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120 GAATTTCATCTTTCATGACTGGACTCCACCAACTATGAAGATCTTTATCTTTGTCTTCAT 179-
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EST89157
                                                                                                                                                                                                                                                                                                                                                                              For clone availability, additional sequence and expression information related to this EST, please check the TIGR Human Gene Index (http://www.tigr.org/tdb/hgi/hgi.html)
Seq primer: M13 Reverse.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        The Institute for Genomic Research 9712 Medical Center Drive, Rockville,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Bioinformatics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Kerlavage, AR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Other_ESTs: EST89156 THC102726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Initial assessment of human gene diversity and expression patterns based upon 83 million nucleotides of cDNA sequence Nature 377 (6547 Suppl), 3-174 (1995)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Tel: 3018699056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Venter, J.C.
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                                                                                    Similarity
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                                                               Conservative
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Salivary gland Homo sapiens
                                                                                                                                                        /clone lib="Salivary gland"
/note="Organ: salivary gland; Vector: pBluescript
Site_1: EcoRI; Site_2: XhoI"
59 c 52 g 108 t
                                                                                                                                                                                                                                        /organism="Homo sapiens"
/mol type="mRNA"
/db_xref="ATCC (inhost):181117"
/db_xref="taxon:9606"
/dev_stage="adult"
                                                                                                                                                                                                                                                                                                                                                             ocation/Qualifiers
                                                                                  12.7%;
59.8%;
                                                               0;
                                                                            Score 77; DB 9
Pred. No. 0.18;
                                                               Mismatches
                                                                                                  DB 9;
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AUTHORS
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LOCUS
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18 1 (bases 1 to 327)

18 Adams, M.D., Kerlavage, A.R., Fleischmann, R.D., Fuldner, R.A., Bult (C.J., Lee, N.H., Kirkness, E.F., Weinstock, K.G., Gocayne, J.D., White (O., Sutton, G., Blake, J.A., Brandon, R.C., Man-Wai, C., Clayton, R.A., Cline, T.R., Cotton, M.D., Earle-Hughes, J., Fine, L.D., Fitzgerald (L.M., Fitzhugh, W.M., Fritchman, J.L., Geoghagen, N.S., Glodek, A., Gnehm, C.L., Hanna, M.C., Hedblom, E., Hinkle, P.S., Jr., Kelley, J.M., Kelley, J.C., Liu, L.-I., Marmaros, S.M., Merrick, J.M., Kelley, J.C., Liu, L.-I., Marmaros, S.M., Merrick, J.M., Shirley, R., Kelley, J.C., Liu, L.-I., Marmaros, S.M., Merrick, J.M., Shirley, R., Small, K.V., Spriggs, T.A., Utterback, T.R., Weidman, J.F., Li, Y., Bednarik, D.P., Cao, L., Cepeda, M.A., Coleman, T.A., Collins, E.J., Dinke, D., Feng, D.-F., Ferrie, A., Fischer, C., Hastings, G.A., He, W.M., Hu, J.S., Greene, J.M., Gruber, J., Hudson, P., Kim, A.K., Kozak, D.L., Kunsch, C., Hungjun, J., Li, H., Meisener, P.S., Olsen, H., Raymond, L., Wenter, J. Chann, T.A., Collins, P.J., Fannon, M.R., Rosen, C.A., Haseltine, W.A., Fields, C., Fraser, C.M. and
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                                                                                                                                                                                                                                                                                                                                                                                         9712 Medical Center Drive,
Tel: 3018699056
Fax: 3018699423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Initial assessment of human gene diversity and expression patterns based upon 83 million nucleotides of cDNA sequence Nature 377 (6547 Suppl), 3-174 (1995)
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                                                                                                                                                                                                                                          For clone availability, additional sequence and endiformation related to this EST, please check the Index (http://www.tigr.org/tdb/hgi/hgi.html)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Other_ESTs: THC102726
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                                                                                                                                                                                          Index (http://www.tigr..
Seq primer: M13 Reverse.
                                                                                                                                                                                                                                                                                                                       Email: arkerlav@tigr.org For clone availability,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                The Institute for Genomic Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Bioinformatics
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Contact: Kerlavage,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Homo sapiens (human)
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/organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="ATCC (inhost):186803"
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EST89161 Salivary gland Homo
histatin 1, mRNA sequence.
                                                                                                                    Contact: Kerlavage,
                                                                                                                                                                                                                       Initial assessment of human gene diversity and expression patterns based upon 83 million nucleotides of cDNA sequence Nature 377 (6547 Suppl), 3-174 (1995) 96026280
                          The Institute for Genomic Research 9712 Medical Center Drive, Rockvill
                                                                                                                                                                                                                                                                                                                                                  Venter, J.C.
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CE 1 (bases 1 to 348)

RS Adams, M.D., Kerlavage, A.R., Fleischmann, R.D., Fuldner, R.A., Bult RS Adams, M.D., Kerlavage, A.R., Fleischmann, R.D., Fuldner, R.A., Bult C.J., Lee, N.H., Kirkness, E.F., Weinstock, K.G., Gocayne, J.D., White, C.J., Lee, N.H., Kirkness, E.F., Weinstock, K.G., Gocayne, J.D., White, C.J., Lee, N.H., Kirkness, E.F., Weinstock, K.G., Gocayne, J.D., White, C.J., Blake, J.A., Brandon, R.C., Man-Wai, C., Clayton, R.A., L.M., Fitzbugh, W.M., Fritchman, J.L., Geoghagen, N.S., Glodek, A., Ghehm, C.L., Hanna, M.C., Hedblom, E., Hinkle, P.S.Jr., Kelley, J.M., Kelley, J.M., Moreno-Palanques, R.F., McDonald, L.A., Nguyen, D.T., Pelligrino, S.M., Phillips, C.A., Ryder, S.E., Scott, J.L., Saudek, D.M., Shirley, R., Small, K.V., Spriggs, T.A., Utterback, T.R., Weidman, J.F., Li, Y., Bednarik, D.F., Cap, D.-F., Ferrie, A., Fischer, C., Hastings, G.A., He, W.W., Hu, J.S., Greene, J.M., Gruber, J., Hudson, P., Kim, A.K., Kozak, D.L., Kunsch, C., Hungjun, J., Li, H., Meissner, P.S., Olsen, H., Raymond, L., Wei, Y.F., Waing, J., Xu, C., Yu, G.L., Ruben, S.M., Dillion, P.J., Fannon, M.R., Rosen, C.A., Haseltine, W.A., Fields, C., Fraser, C.M., and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                136 TAGAÁGÁÁÁTTCCÁÍ-----GÁAAAGCÁTCÁTTCACATCGÁGÁATTTCCÁTTTTATGG
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For clone availability, additional sequence and expression
information related to this EST, please check the TIGR Human Gene
Index (http://www.tigr.org/tdb/hgi/hgi.html)
Seq primer: M13 Reverse.
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AA376689.1 GI:2029007
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/rote="Organ: salivary gland; Vector: pBluescript SK-;
/note="Organ: salivary gland; Vector: pBluescript SK-;
Site_1: EcoRI; Site_2: XhoI"
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AUTHORS
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BX283872 NIH MGC 81
IMAGE:4289874, mRNA
BX283872
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For clone availability, additional sequence and expression
information related to this EST, please check the TIGR Human Gene
Index (http://www.tigr.org/tdb/hgi/hgi.html)
Seg primer: M13 Reverse.
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Initial assessment of human gene diversity and expression patterns based upon 83 million nucleotides of cDNA sequence
Nature 377 (6547 Suppl), 3-174 (1995)
          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; 1 (bases 1 to 390)
Ebert,L., Heil,O., Hennig,S., Neubert,P., Partsch,E. Radelof,U., Schneider,D. and Korn,B.
Human UnigeneSet - RZPD3
                                                                                                                    Homo sapiens
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9712 Medical Center Drive, Rockville, MD 20850 USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Other_ESTs: EST89144 THC102726
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/note="Organ: salivary gland; Vector: pBluescript SK-;
Site_1: EcoRI; Site_2: XhoI"
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/db_xref="taxon:9606"
/dev_stage="adult"
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/mol_type="mRNA"
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Search completed: December 13, Job time : 1867 secs

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Location/Qualifiers
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Fax: +49 30 32639 111
www.rzpd.de
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RZPDLLB; I.M.A.G.E. CDNA Clone Collection; Human UnigeneSet - RZPD3 (RZPDLIB No.972)
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/note=Torgan: muscle (skeletal); Vector: pDNR-LIB
(Clontech); Site 1: SfiI (ggcgcctcggcc); Site 2: SfiI
(ggccattatggcc); 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence:
5'-ATTCTAGAGGCCGAGGCGGCCGACATG-dT(30) BN-3' (where B = A, street and street
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C, or G and N = A, C, G, or T). Average insert size 1.55 kb (range 1.0-4.0 kb). 15/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (PalAlto, CA)."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /clone="IMAGp958N191131 ; IMAGE:4289874"
/lab_host="DH10B (T1 phage-resistant)"
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/db_xref="taxon:9606"
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 GenCore version (c) 1993 - 2003
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Compugen
 Ltd
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Database Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries Minimum DB Maximum DB Sequence: Title: Perfect score: OM nucleic Total number of hits satisfying chosen parameters: Scoring table: Searched: 9 seq length: 0 seq length: 2000000000 ı nucleic search, using sw model IDENTITY NUC Gapop 10.0 , Gapext 1.0 US-10-079-754A-4
604
1 gaagtattttcagttctata.....tatcaagcataaaaaaaa December 12, 2003, 22:51:27; Search time 2599 Seconds (without alignments) 9507.278 Million cell updates/sec 2888711 seqs, 20454813386 residues GenEmbl: * gbov:
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em_ov: * 5777422 604

Pred. No. is the number of results predicted by chance to have

score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No. 0.0 იიი 000 a O a a a Score 55344445 Query Match 890 890 85 7736 85 86148 85 8100000 85 8161549 .0 49306 .0 154071 .0 250823 .9 13449 .9 250022 .6 186134 .6 349980 .6 254436 110000 0 2401767 0 2401767 0 2401768 18 141568 18 185969 14 143842 14 195342 14 195342 14 195342 14 195342 14 195343 Length 195534 524 558 542 552 1584 1584 480 480 DВ AC131219 AC063956 AC063967 AC069037 AC0134133 AC0134033 AC0115606 AE014823 AC0115606 AE014821 AE014821 AE014827 HUMBHRPA BD071674 AC106950 AC094531 AX588147 AX588483 AX616321 HUMHIS2X BC009791 HUMSTTRNA HUMSTATHA AK092678 BD071749 HUMHIS1X AY154893 ╏ AC063956 Homo sapi AC063937 Homo sapi AC134934 Bos tauru AC134917 Bos tauru AC134917 Bos tauru AC134173 Bos tauru AC115407 Bos tauru AC115606 Dictyoste AE014823 Plasmodiu AC115598 Dictyoste AE014821 Plasmodiu AC115684 Dictyoste AE014824 Plasmodiu AX346287 Sequence AE014827 Plasmodiu AX34587 Sequence AE014827 Plasmodiu AC115684 Dictyoste BX004887 Zebratish AX344567 Sequence AE014827 Plasmodiu X76903 E. histolyti AF310889 Dictyoste AC016100 Dictyoste Continuation (11 o AC024676 Homo sapi AX34580 Sequence AX616321 Sequence M2665 Human hista BC009791 Homo sapi M18371 Human stath M18078 Human stath AK092678 Homo sapi BD071749 Secreted M26664 Human hista AY154893 Bos tauru M18372 Human histi BD071674 Secreted Continuation (2 of AC094531 Rattus no AC131219 Rattus no L04132 Human hista AX588483 AX616321 BD071675 Secreted AX588147 Sequence AC134173 Bos tauru BC017835 Homo sapi Description Sequence Sequence

ALIGNMENTS

REFERENCE AUTHORS		SOURCE	KEYWORDS	VERSION	ACCESSION	DEFINITION	Locus	AC134173/c	RESULT 1
Hovidae; Bovinae; Bos. 1 (bases 1 to 195534) Muzny,D.M., Adams,C., Adio-Oduola,B., Ali-osman,F.R., Allen,C.,	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;	Bos taurus (cow)	HTG; HTGS_PHASE1; HTGS_DRAFT.	AC134173.1 GI:23306007	Pieces. AC134173	Bos taurus clone RP42-254I13, WORKING DRAFT SEQUENCE, 26 unordered	AC134173 195534 bp DNA linear HTG 27-SEP-2002		

(see http://www.hgsc.bcm.tmc.edu/docs/Genbank_draft_data.html).
NOTE: This is a 'working draft' sequence. It currently
consists of 26 contigs. The true order of the pieces
is not known and their order in this sequence record is

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Chen, G., Chen, C., Carucer, M., Cavazos, S.K., Christopoulos, C., Chen, G., Chen, R., Chen, Z., Chowchry, I., Christopoulos, C., Cleveland, C.D., Cox.C., Coyle, M.D., Datborne, S.R., David, R., Davia, M.L., Davis, C., Davy-Carroll, L., Dederich, D.A., Delaney, K.R., Delagado, O., Denn, A.L., Ding, Y., Dinh, H.H., Delaney, K.R., Delagado, O., Denn, A.L., Ding, Y., Dinh, H.H., Delaney, K.R., Delagado, O., Denn, A.L., Ding, Y., Dinh, H.H., Delaney, K.R., Edgar, D., Edwards, C.C., Elhaj, C., Escotto, M., Earnhart, C., Edgar, D., Flagg, N., Ford, J., Foster, P., Dinh, H.H., Doubthwaite, K.J., Draper, H., Dugan-Rocha, S., Durbin, K.J., Earnhart, C., Edgar, D., Flagg, N., Ford, J., Foster, P., Frantz, P., Falls, T., Ferraguto, D., Flagg, N., Ford, J., Foster, P., Frantz, P., Garza, N., Gill, R., Godbisi, A., Gao, J., Garcia, A., Garner, T., Garza, N., Gill, R., Gozrell, J.H., Guevara, W., Gunaratne, P., Hale, S., Hamilton, K., Harris, C., Harris, K., Hart, M., Havlak, P., Hawes, A., Hernandez, J., Hamilton, K., Harris, C., Hoblins, B., Hernandez, O., Hodgson, A., Hogues, M., Holloway, C., Hollins, B., Hernandez, O., Hodgson, A., Hogues, M., Holloway, C., Hollins, B., Hamilton, K., Yosaris, S., Kan, U., King, L., Korvah, J., Kovar, C., Karlsson, E., Huber, J., Hulyk, S., Hume, J., Jackson, L.E., Jacobson, B., Jia, Y., Johnson, R., Jolivet, S., Joudah, S., Karlsson, E., Karlsva, J., Lucier, R., Luna, R., Ma, J., Kovar, C., Kratovic, J., Kureshi, A., Landry, N., Leal, B., Lewis, L.C., Lewis, L., Li, J., Liu, R., Ma, J., Kovar, C., Kratovic, J., Kureshi, A., Landry, N., Martindale, A., Martinez, E., Mahsen, E., Martinez, E., Martinez, E., Martinez, E., Martinez, E., Martinez, E., Pu, L.L., Quilse, M., Ren, Y., Sonaike, T., Shoshtari, N., Sisson, I., Solergran, E., Sonaike, T., Saparke, A., Stanley, H., Stone, H., Soler, H., Stone, H., Soler, H., Stone, R., Wang, Q., Williamson, A., Washoto, D., Vinson, R., Wang, 
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                                                              Chemistry: Dye-primer Bodipy: 82% of reads
Chemistry: Dye-terminator Big Dye: 18% of reads
Assembly program: Phrap; version 0.990329
Consensus quality: 185623 bases at least Q40
Consensus quality: 190257 bases at least Q30
Consensus quality: 192466 bases at least Q20
Estimated insert size: 204493; sum-of-contigs estimation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Center project name: VUAE
Center clone name: RP42-254I13
----- Summary Statistics
Sequencing vector: M13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Web site: http://www.hgsc.bcm.tmc.edu/Contact: hgsc-help@bcm.tmc.edu
Quality coverage: 4x in Q20 bases; sum-of-contigs estimation
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Center: Baylor Co
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REFERENCE AUTHORS TITLE

JOURNAL

COMMENT

NOTE: Estimated insert size may differ from sequence length

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TITLE
JOURNAL
REFERENCE
AUTHORS
TITLE
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BASE COUNT
ORIGIN
                                                                                                                                                                                                                          FEATURES
                        Query Match
Best Local Similarity
                                                                                                                                                                                                      source
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/mol_type="genomic DNA"
/db_xref="taxon:9913"
                                                                                                                                                                                                                          Location,
                                                                                                                                                                                                                                    128393: gap of unknown length
138140: contig of 9747 bp in le
138240: gap of unknown length
150687: contig of 12447 bp in l
150787: gap of unknown length
16614: contig of 15627 bp in l
166314: gap of unknown length
19534: contig of 29020 bp in l
                                                                                                                                                                                                                                                                                                                                                                                                                                   66244: gap of u
73033: gap of u
73133: gap of u
80030: contig o
80130: gap of u
807861: gap of u
87861: gap of u
95726: contig o
95726: gap of u
105154: gap of u
116716: contig
23.3°; F1
                                                                                                                                                                                                                                                                                                                                                                                              105.054: contig of 9228 bp in length 105.154: gap of unknown length 116716: contig of 11562 bp in length 116816: gap of unknown length 128293: contig of 11477 bp in length
                        23.3%; Score 141; DB 2; 1 100.0%; Pred. No. 2.3e-17;
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This clone was selected for full length sequencing because it passed the following selection criteria: matched mRNA gi: 4504528.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cDNA Library Preparation: CLONTECH Laboratories, Inc. cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Sequencing Group at the Stanford Human Center, Stanford University School of Medicine, Stanford, web site:

http://www-shgc.stanford.edu
Contact: (Dickson, Mark) mcd@paxil.stanford.edu
Dickson, M., Schmutz, J., Grimwood, J., Rodriquez, A., and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Direct Submission
Direct Submission
Submitted (03-DEC-2001) National Institutes of Health, Mammalian Submitted (03-DEC-2001) National Institutes of Health, Mammalian Gene Collection (MGC), Cancer Genomics Office, National Cancer Tratitute. 31 Center Drive, Room 11A03, Bethesda, MD 20892-2590,
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BC017835
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Tissue Procurement: CLONTECH
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Mammalia; Eutheria;
1 (bases 1 to 566)
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Contact: MGC help desk
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/protein_id="AAH17835.1"
/db_xref="GI:17389615"
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/clssue_type="Skeletal Muscle"
/clone_lib="WIH MGC_81"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                        /mol_type="mRNA"
/db_xref="LocusID:3346"
                                                                                                                   translation="MKFFVFALVLALMISMISADSHEKRHHGYRRKFHEKHHSHREFP"
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                                                                                 120 GAATTICATCITTCATGACTGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCAT 179
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Treacy, M., Spaulding, V. and Agostino, M.J
Secreted expressed sequence tags (BSSTs)
Patent: JP 2001519667-A 485 23-OCT-2001;
GENETICS INSTITUTE INC
                                                                                                                                                                                                                                                                                                                                                              PI MAURICE TREACY, VIKKI SPAULDING, MICHAEL J AGOSTINO PC C12N15/12, C12N5/10, C07K14/47, C12Q1/68, A61K38/17 CC Stran
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                                                                                                                Conservative
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10-APR-1997 US 08/838821
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JP 2001519667-A/485
23-OCT-2001
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                                                                                                                                                                                                                                                        /organism='Unidentified'.
                                                                                                                                                                                    /organism="unidentified"
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/db_xref="taxon:32644"
74 c 65 g 11
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                                                                                                                                                                                                                                                                                                     expressed sequence tags (sESTs)
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Pred. No. 0.00015;
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AX588483
Sequence
AX588483
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Sequence 22 from Patent
AX588147
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ALVLALMISMISA/DS"
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/mol_type="genomic DNA"
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a4 220
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                                                                                                                                                                                                                                                                                                Human cdnas and proteins and uses thereof Patent: WO 02094864-A 5 28-NOV-2002;
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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80 c 60 g 145 t 2 others
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Pred. No. 0.0013;
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polyA_site
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38
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Histatins, a family of sallvary histidine-rich proteins, encoded by at least two loci (HIS1 and HIS2)
Biochem. Biophys. Res. Commun. 160 (2), 495-502 (1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 524)
                                                                                                                                                                                                                                                                                                                                                                      Original
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                   GAATTTCATCTTTCATGACTGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCAT
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GATTCTCCTCTTGAGTAAAAGGACTCAGCCAACTATGAAGTTTTTTTGTTTTTGCTTTAAT
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                                                  Conservative
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LPLFEESKKNANEKHYNLLYTLCFRILAFSIVT"
318. 438
397. 402
423. 438
                                                                                                                           /gene="HIS2"
                                                                                                                                                                               /product="histatin 2"
/protein_id="AAA58646.1"
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                                                                                                                                                                                                                                   /gene="HIS2"
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/db_xref="taxon:9606"
/tissue_type="parotid gland"
                                                                                                                                                                    translation="MKFFVFALILALMLSMTGADSHAKRHHGYKRKFHEKHHSHRGYR
                                                                                                                                                                                                                       codon_start=1
                                                                                                                                                                                                                                                             gene="HIS2"
                                                                                                                                                                                                                                                                                                                                                       ocation/Qualifiers
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Pred. No. 0.0013;
0; Mismatches 4
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                                                  Mismatches
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120 GAATTTCATCATGACTGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCAT

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ORGANISM
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BC009791
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KEYWORDS .
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Best Local S
Matches 100
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   100;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Homo sapiens, complete cds. BC009791
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Clone distribution: MGC clone distribution information can be for through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Series: IRAL Plate: 19 Row: o Column: 1
This clone was selected for full length sequencing because it
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CDNA Library Preparation: CLONTECH Laboratories, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Institute for Systems Biology http://www.systemsbiology.org contact: amadam@systemsbiology.org Anup Madan, Rachel Dickhoff, Jessica Fahey, Stephanie Ford, Julia Greene, Mark Ketteman and Anuradha Madan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Direct Submission
Submitted (02-JUL-2001) National Institutes of Health, Mammalian
Gene Collection (MGC), Cancer Genomics Office, National Cancer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Email: cgapbs-r@mail.nih.gov
Tissue Procurement: CLONTECH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NIH-MGC Project URL: http://mgc.nci.nih.Contact: MGC help desk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                               passed the following selection criteria: matched mRNA gi: 4557652.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Strausberg, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BC009791
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                     Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Institute, 31 Center Drive, Room 11A03,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TATGGCTCTCATCCTAGCCATGATTAGAGCTGATTCATCTGAAGAGAAACGTCACAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TARAAGAAATTCCATGAAAAGCATCATTCACA 190
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (bases 1 to 558)
                                                                                               187
                                                                                                             /translation="mkffvfaltlalmlsmtgadshakrhhgykrkfhekhhshrgyrsnylydn"
                                                                                                                                                   /product="histatin 3"
/protein_id="AAH09791.1"
/db_xref="GI:14602561"
                                                                                                                                                                                                                                                                      /clone="MGC:13578 IMAGE:4293405"
/tissue type="Skeletal Muscle"
/clone_Tib="WIH_MGC_81"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                           /mol_type="mRNA"
/db_xref="LocusID:3347"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                             ocation/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                       organism="Homo sapiens"
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                                                                                                                                                                                                                                                  note="Vector: pDNR-LIB"
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Primates;
Score 68.2; DB 9
Pred. No. 0.0033;
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                                                                                               178
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MGC:13578
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                                                                                                                                                                       147;
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1 (bases 1 to 542)

Dickinson, D. P., Ridall, A. L. and Levine, M. J.

Human submandibular gland statherin and basic histidine-rich peptide are encoded by highly abundant mRNA's derived from a commo ancestral sequence
                                                                                                                                                                                                                                          262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Original source text: Human female submandibuar gland, cDNA to mRNA, clone pBRHSMSF988.2.
Draft entry and computer readable copy of sequence [1] kindly provided by D.P.Dickinson 21-MAR-1988.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Biochem. Biophys. Res. Commun. 149 (2), 784-790 (1987)
88106506
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 GATA-----TTTTCAACAATACCAGCCATATCAACGATATCCACTAAATTATCCTCCTG 313
                                                                  TGATTAGAGCTGATTCATCTGAAGAGAAACGTCACAGGAAAACGGAAAAAAACATCATAGAG
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                                   TGATTGGAGCTGATTCATCTGAAGAGAAATTTTTTGCGTAGAATTGGAAGATTCGGTTATG
                                                                                                                                                                                                                                    170
bp 1
                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                      /product="statherin"
0 a 117 c 76 g 179 t
upstream of PstI site; chromosome
                                                                                                                                                                                                                                                                                                             114. .242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /organism="Homo sapiens"
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/db_xref="taxon:9606"
/map="4q11-q13"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Location/Qualifiers
                                                                                                                                                                                                                                                                                                                       /note="statherin signal
                                                                                                                                                                                                                                                                                                                                         gene="STATH"
                                                                                                                                                                                                                                                                                                                                                                        EQPLYPQPYQPQYQQYTF"
                                                                                                                                                                                                                                                                                                                                                                                                                          protein_id="AAA60600.1"
|db_xref="GI:338611"
                                                                                                                                                                                                                                                                                       gene="STATH"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               note="statherin precurser"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gene="STATH"
                                                                                                                                                                                                                                                                                                                                                                                            translation="MKFLVFAFILALMVSMIGADSSEEKFLRRIGRFGYGYGPYQPVP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gene="STATH"
                                                                                                                                                                                 11.2%;
61.2%;
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                                                                                                                                                                   Score 67.6; DB 9; Length 5
Pred. No. 0.0042;
0; Mismatches 84; Indels
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239
                   314 CGT---ATCCATTTCCTTAAAATGCTGCTTAGTAACTACAGGACATGATTAGAGAGATTT
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                                                                                                                                                                                                                        140 GGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCATTATGGCTCTCATCCTAGCCA 199
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Sabatini,L.M., Carlock,L.R., Johnson,G.W. and Azen,E.A. CDNA cloning and chromosomal localization (4g11-13) of a statherin, a regulator of calcium in sallva Am. J. Hum. Genet. 41 (6), 1048-1060 (1987)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           regulatory protein;
Homo sapiens (human)
Homo sapiens
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Draft entry and computer-readable sequence [1] kindly submitted by L.Sabatini 19-JAN-1988.
                                                                                                                                                                                                                                                                                                                      278
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Mammalia; Eutheria;
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                                                                                                                                                                                                                                                                        Similarity
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 AATACCAACAATATACCTTTTAATATCATCAGTAACTGCAGGACATGATTATTGAGGCTT
                                                                                                                                                         GAACCCAGCCAACTATGAAGTTCCTTGTCTTTGCCTTCATCTTGGCTCTCATGGTTTCCA 118
                                                                                                                           TGATTGGAGCTGATTCATCTGAAGAGAAATTTTTTGCGTAGAATTGGAAGATTCGGTTATG
                                                              172 a 122 c 78 g 180 t bp upstream of PstI site; chromosome 4q11-q13
                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /organism="Homo sapiens"
/mol_type="mRNA"
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1...552
                                                                                                                                                                                                                                                                                                                              /gene="STATH"
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/note="statherin signal peptide"
/note="statherin signal peptide"
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                                                                                                                                                                                                                                                                                                                                                                                                                                           /protein_id="AAA60594.1"
/db_xref="GI:338508"
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/translation="MKFLVFAFILALMVSMIGADSSEEKFLRRIGRFGYGYGPYQPVP
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Pred. No. 0.0042;
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                                                                                                                                                                                       al Similarity
147; Conser
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Submitted (04-JUL-2002) Takao Isogai, FLJ Project(HRI Team); 2-6-7

Razusa Kamatari, Kisarazu, Chiba 292-0812, Japan

(E-mail:genomics@hri.co.jp, Tel:81-38-52-3975, Fax:81-438-52-3986)

NEDO human cDNA sequencing project supported by Ministry of
Economy, Trade and Industry of Japan; cDNA full insert sequencing:
Research Association for Biotechnology (RAB); cDNA library

construction: Helix Research Institute (HRI) (supported by Japan

Key Technology Center etc.); 5'- & 3'-end one pass sequencing: RAB,

HRI, and Biotechnology Center, National Institute of Technology and

Evaluation; clone selection for full insert sequencing: HRI and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Oshima, A., Takahashi-Fujii, A., Tanase, T., Imose, N., Takeuchi, K., Arita, M., Musashino, K., Yuuki, H., Hara, H., Sugiyama, T., Irie, R., Otsuki, T., Sato, H., Wakamatsu, A., Ishii, S., Yamamoto, J., Isono, Y. Kawai-Hio, Y., Satto, K., Nishikawa, T., Kimura, K., Yamashita, H., Matsuo, K., Nakamura, Y., Sekine, M., Kikuchi, H., Kanda, K., Wagatsuma, M., Murakawa, K., Kanehori, K., Sugiyama, A., Kawakami, B., Suzuki, Y., Sugano, S., Nagahari, K., Masuho, Y., Nagai, K. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1584 bp
Homo sapiens cDNA FLJ35359 fis,
to CH-TOG PROTEIN.
AKN92670
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         sogai, T. and Yamamoto, J.
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                                  TGATTAGAGCTGATTCATCTGAAGAGAAACGTCACAGGAAACGGAAAAAAACATCATAGAG 259
                                                                                            GAACCCAGCCAACTATGAAGTTCCTTGT
                                                                                                                          GGACTCCACCAAATATGAAGATCTTTATCTTTTGTCTTCATTATGGCTCTCATCCTAGCCA 199
TGATTGGAGCTGATTCATCTGAAGAGAAATTTTTGCGTAGAATTGGAAGATTCGGTTATG
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LSKLPKTFMTKLRQKNGKREKRPWSL"
, 298 c 331 g 429 t
                                                                                                                                                                                                                                                                                                                                                                         /translation="Moddsemiklpudgkcehkimkarlsgyeealkipgkikdeksp
ewskfiglikkfyudsnavvqlkgleaalivyenahvaaktigetvvsgvvskvpnqpk
akakelgieiclmyleiekgeavqeellkglunknpkiivacietlkkalsefgski
llkpiikvlpklfesrekavrdeakliaveiyrwirdalrpplqninsvqlkeleeem
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       89. .997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /clone="SALGL1000107"
/tissue_type="salivary gland"
/clone_Tib="SALGL1"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /note="unnamed protein product"
/codon_start=1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /note="cloning vector: pME18SFL3"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
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/db_xref="GI:21751328"
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                                                                                                                                                                                                          11.2%;
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Pred. No. 0.
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Best Local S
Matches 93
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                                                                                                                                                 167 TAAAAGAAATTCCAT 182
                                                                                                                                                                                                                              180 TATGGCTCTCATCCTAGCCATGATTAGAGCTGATTCATCTGAAGAGAAAACGTCACAGGAA 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         260 GATA-----TTTTCAACAATACCAGCCATATCAACGATATCCACTAAATTATCCTCCTG 313
                                                                                                                                                                                                                                                                                               120 GAATTTCATCTTTCATGACTGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCAT 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENETICS INSTITUTE INC
OS Unidentified
PN JP 2001519667-A/559
PD 23-CCT-2001
PF 10-APR-1998 JP 1998
                                                                                                                                                                                                                                                                     47
                                                                                                                                                                                                                                                                                                                               l Similarity
93; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PT CC Coubl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Jacobs, K., Mccoy, J.M., Lavallie, E.R., Racie, L.A., Treacy, M., Spaulding, V. and Agostino, M.J. Secreted expressed sequence tags (sESTs) Patent: JP 2001519667-A 559 23-OCT-2001;
            M26664.1 G
histatin 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PI MAURICE TREACY, VIKKI SPAULDING, MICHAEL J AGOSTINO C12N15/12, C12N5/10, C07K14/47, C12Q1/68, A61K38/17 CC St
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  unidentified unidentified
                                                      Human
                                                                       HUMHIS1X
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                                                                                                                                                                                                                                                                   GATTCTCCTCTTGAGTAAAAGGACTCAGCCAACTATGAAGTTTTTTTGTTTTTTGCTTTAAT 106
                                                                                                                                                                            ACGGAAAAAACATCAT 255
                                                                                                                                                                                                         CTTGGCTCTCATGCTTTCCATGACTGGAGCTGATTCACATGCAAAGAGAGACATCATGGGTA 166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGT---ATCCATTTCCTTAAAATGCTGCTTAGTAACTACAGGACATGATTAGAGAGATTT 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DAVID MERBERG,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             (bases 1 to 203)
                                                                                                                                                                                                                                                                                                                                                                                                        59
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10-APR-1998 JP 1998543069
10-APR-1997 US 08/838821
                                                                                                                                                                                                                                                                                                                               Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   KENNETH JACOBS, JOHN M MCCOY, EDWARD R LAVALLIE, LISA A RACIE,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Unidentified JP 2001519667-A/559
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /organism='Unidentified'.
Location/Qualifiers
                          GI:292143
                                                                                                                                                                                                                                                                                                                                                                                                     /db_xref="taxon:32644"
43 c 39 g
                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="unidentified"
/mol_type="genomic DNA"
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Location/Qualifiers
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Pred. No. 0.0059;
D; Mismatches 4
                                                      480 bp
mRNA, co
                                                        complete
                                                                                                                                                                                                                                                                                                                                                                                                        62
                                                                                                                                                                                                                                                                                                                                                         DB 6;
                                                                      mRNA
                                                        cds
                                                                                                                                                                                                                                                                                                                                                         Length 203;
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AY154893
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Best Local Similarity 59.6%;
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 2 (bases 1 to 486)
Rijnkels,M. and Rosen,J.M.
                                                           Rijnkels,M., Elnitski,L., Miller,W. and Rosen,J.M. Multi-species comparative sequence analysis of the casein gene cluster region: A gene domain encoding epithelial secretory
                                                                                                                                                                                                                                       AY154893
Bos taurus statherin (STATH)
AY154893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sabatini, L.M. and Azen, E.A.
Histatins, a family of salivary histidine-rich proteins,
encoded by at least two loci (HIS1 and HIS2)
Biochem. Biophys. Res. Commun. 160 (2), 495-502 (1989)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Original
                             Unpublished
                                                 proteins
                                                                                                                              Bovidae; Bovinae;
                                                                                                                                                                          Bos taurus
                                                                                                                                                                                         Bos taurus (cow)
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                                                                                                                                                                                                                                                                                                                                                                          TAAAATGCTGCTTAGTAACTACAGGACATGATTAGAGAGATTT 370
                                                                                                                                                                                                                                                                                                                                                                                                                 CATCATTCACATCGAGAATTTCCATTTTATGGGGACTATGGATCAAATTATCTATATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                             CAACAATACCAGCCATATCAACGATATCCACTAAATTATCCTCCTGCGTATCCATTTCCT 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTGATTCACATGAAAAGAGACATCATGGGTATAGAAGAAAATTCCAT-----GAAAAG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCAACTATGAAGTTTTTTGTCTTTGCTTTAGTCTTGGCTCTCATGATTTCCATGATTAGC
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462. .467
/gene="HIS1"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /codon_start=1
/product="histatin 1"
/protein_id="AAA58645.1"
/db_xref="GI:292144"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 translation="MKFFVFALVLALMISMISADSHEKRHHGYRRKFHEKHHSHREFF/
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              /tissue_type="parotid gland"
l. .480
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                                                                                                                           Bos.
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Primates;
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Pred. No. 0.0067;
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AUTHORS
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HUMBHRPA
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                                                                                                                                                                                                             1 (bases 1 to 491)
Dickinson,D.P., Ridall,A.L. and Levine,M.J.
Human submandibular gland statherin and basic histidine-rich
peptide are encoded by highly abundant mRNA's derived from a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Submitted (24-SEP-2002) Molecular and Cellular Biology, Baylor College of Medicine, One Baylor Plaza, Houston, TX 77030, USA Location/Qualifiers
                                                                                             Draft entry and computer readable copy provided by D.P.Dickinson 21-MAR-1988.
                                                                                                                                                                                         ancestral sequence
Biochem. Biophys. F
                                                                                                                                                                                                                                                                                                                                 histidine-rich protein.
Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                            HUMBHRPA
Human histidine-rich protein mRNA,
                                                                                                                         mRNA, clone pBRHSMSF1B8.1.
                                                                                                                                           Original source text: Human female
                                                                                                                                                             3426601
                                                                                                                                                                          88106506
                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata;
Mammalia; Eutheria; Primates;
                                                                                                                                                                                                                                                                                                                  Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                  M18372.1 GI:179465
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /protein_id="AAN85581.1"
/db_xxef="G1:27227455"
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PSYPAYPYPYPYPVQ"
92 c 79 g 160 t
                                                                           Location/Qualifiers
                                                                 1. .493
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/mol_type="mRNA"
/db_xref="taxon:9913"
/chromosome="6"
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/product="statherin"
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ALIGNMENTS

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Cow, gene, ss, histatin; bovine; salivary secretion; oral cavity; non-immune defence system; oral candidosis; gene therapy; microbial infection; fungal infection; dental caries; plaque; tartar; cystic fibrosis; systemic infection; Candida infection; mastitis;
23-AUG-1999;
29-OCT-1999;
                              19-FEB-2002; 2002US-0079754.
                                                                                                                                                   Bos taurus.
                                                                                                                                                                                                                                      Bovine histatin like polypeptide,
                                                                                                                                                                                                                                                            01-MAY-2003 (first entry)
                                                                                                                                                                                                                                                                                                      ABX11391 standard; cDNA; 604
                                                                         US2002164625-A1
                                                                                                                                                                        fungicide; antibacterial.
99US-150330P.
99US-162701P.
                                                                                                       Location/Qualifiers
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/product= "Histatin like polypeptide"
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Result No.

Score

8765488

604 465.4 448.2 423.4 238.4 115 87

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The invention discloses isolated histatin polynucleotides and CC polypeptides, which comprise sequences expressed in bovine. Histatins are chistidine rich and specific to the salivary secretions. They are believed to function as part of the non-immune defence system, particularly in the CC candidosis. Also disclosed are compositions comprising the histatin CC polypeptide or polynucleotide, and at least one component consisting of polypeptide or polynucleotide, and at least one composentions. The CC physiological or pharmaceutical carriers or immunostimulants. The CC physiological or pharmaceutical carriers or immunostimulants. The CC comprising the polypeptide, is useful for treating (e.g. gene therapy) a CC disorder in a mammal, particularly microbial or fungal infections. The CC mapping or in the positional cloning of genes. Specifically, the CC mapping or in the positional cloning of genes. Specifically, the CC polypeptide or polynucleotide is useful for treating fungal or bacterial crifections of the oral cavity (e.g. dental carries, plaque or tartar), CC vagina, urethra, ear, skin, respiratory tract (e.g. cystic fibrosis CC systemic infections such as systemic Candida infection. The polypeptide or polynucleotide is as a machinal carries, plaque or treating Systemic infections such as systemic candida infection. The polypeptide or treating mastitis. The sequence presented is a cDNA encoding a bovine treating histatin like polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 604
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29-OCT-1999;
22-AUG-2000;
27-OCT-2000;
polypeptides, which comprise sequences expressed in bovine. Histatins histidine rich and specific to the salivary secretions. They are belie to function as part of the non-immune defence system, particularly in oral cavity and have promise as therapecutic agents in humans with oral candidosis. Also disclosed are compositions comprising the histatin polypeptide or polynucleotide, and at least one component consisting ophysiological or pharmaceutical carriers or immunostimulants. The
                                                                                                                                                                                                                                                                                                                 New histatin polynucleotides and polypeptides expressed in bovine tissues, useful for treating bacterial or fungal infections in mare; infections of the oral cavity, vagina, urethra, ear or skin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Cow; gene; ss; histatin; bovine; salivary secretion; oral cavity; non-immune defence system; oral candidosis; gene therapy; microbial infection; fungal infection; dental caries; plaque; taricystic fibrosis; systemic infection; Candida infection; mastitis;
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DB; ABG75791.
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                                                                                                                                      Cow; gene; ss; histatin; bovine; salivary secretion; oral cavity; non-immune defence system; oral candidosis; gene therapy; microbial infection; fungal infection; dental caries; plaque; tartar; cystic fibrosis; systemic infection; Candida infection; mastitis; fungicide; antibacterial.
                                                                                                                                                                                                                                                                                                                 Bovine histatin like polypeptide, #2,
                                                                                                                                                                                                                                                                                                                                                                             01-MAY-2003
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                                                                                                                                                                                                                                                                                                                                                                          (first
  Location/Qualifiers 149..325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CDNA; 585
                                                                                                                                                                                                                                                                                                                                                                          entry)
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99.8%;
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Pred. No. 7.2e-91;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           67 G;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
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                                                                                                                                                                                                                                                                                                                    CDNA.
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                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 450; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29-OCT-1999;
22-AUG-2000;
27-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  New histatin polynucleotides and polypeptides expressed in bovine tissues, useful for treating bacterial or fungal infections in man e.g. infections of the oral cavity, vagina, urethra, ear or skin,
                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Claim 1; Page 11; 17pp; English
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                                                                                                                                                                                                                                                                                                                                                                   585
                      CATGATTAGAGCTGATTCATCTGAAGAGAAACGTCACAGGAAACGGAAAAAAACATCATAG
                                                                        AGGATATTTTCAACAATACCAGCCATATCAACGATATCCACTAAATTATCCTCCTGCGTA
                                                                                           AGGATATTTTCAACAATACCAGCCATATCAACGATATCCACTAAATTATCCTCCTGCGTA
                                                                                                                                              CATGATTAGAGCTGATTCATCTGAAGAGAAACGTCACAGGAAAACGGAAAAAACATCATAG
                                                                                                                                                                                                                     CAGGACTCCACCAAATATGAAGATCTTTATCTTTATCTTCATTATGGCTCTCATCCTAGC
                                                                                                                                                                                                                                                       CTGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCATTATGGCTCTCATCCTAGC
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 TCCATTTCCTTAAAATGCTGCTTAGTAACTACAGGACATGATTAGAGAGATTTTTCACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Grigor MR,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; 99US-162701P.
; 2000US-0644190.
; 2000US-0699146.
                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                   BP;
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                                                                                                                                                                                                                                                                                                                                                                 215 A; 111 C; 85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            product= "Histatin like polypeptide"
                                                                                                                                                                                                                                                                                                          74.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Molenaar AJ,
                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                       Score 448.2; DB 25; Pred. No. 3.7e-87; 0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                 G; 174 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Davis
                                                                                                                                                                                                                                                                                                                           _25; Length 585;
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TGATTTTTCCTACTCTTTTCTGTTGTTGAAAAACCATCTTTCAAATGAATAAAACAAAGA

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ABSULT 4
ABX11393
ABX
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  The invention discloses isolated histatin polynucleotides and polypeptides, which comprise sequences expressed in bovine. Histatins are histidine rich and specific to the salivary secretions. They are believed to function as part of the non-immune defence system, particularly in the oral cavity and have promise as therapeutic agents in humans with oral candidosis. Also disclosed are compositions comprising the histatin polypeptide or polynucleotide, and at least one component consisting of physiological or pharmaceutical carriers or immunostimulants. The histatin polynucleotide, polypeptide, or the cosmetic composition
                                                                                                                                                                                                                                                                                                                                      New histatin polynucleotides and polypeptides expressed in bovine tissues, useful for treating bacterial or fungal infections in mar e.g. infections of the oral cavity, vagina, urethra, ear or skin, systemic infections
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WPI;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       29-OCT-1999; 99US-162701P.
22-AUG-2000; 2000US-0644190.
27-OCT-2000; 2000US-0699146.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      non-immune defence system; oral candidosis; gene therapy; microbial infection; fungal infection; dental caries; plaque; tartar; cystic fibrosis; systemic infection; Candida infection; mastitis;
                                                                                                                                                                                                                                                                                      Claim
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          23-AUG-1999;
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DB; ABG75796.
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                                                                                                                                                                                                                                                                          1; Page 13; 17pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENESIS RES
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             99US-150330P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /*tag= a
/product= "Histatin like polypeptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ₹,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       & DEV CORP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Molenaar
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Davis
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SR;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         cavity;
                                                                                                                                                                                                                                                                                                                                                                in mammals, skin, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       557
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RESULT 5
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XX ABX1
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XX Bovi
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XX Cow;
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01-MAY-2003

(first entry)

ABX11394

standard;

cDNA;

267

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Bovine mammary tissue cDNA clone.

Cow; ss; histatin; bovine; salivary secretion; oral cavit; non-immune defence system; oral candidosis; gene therapy; microbial infection; fungal infection; dental caries; placeystic fibrosis; systemic infection; Candida infection; m.

infection; mastitis;

plaque;

tartar;

fungicide;

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Best Local S
Matches 466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    disorder in a mammal, particularly microbial or fungal infections. The histatin polynucleotide is also useful in genome mapping, physical mapping or in the positional cloning of genes. Specifically, the polypeptide or polynucleotide is useful for treating fungal or bacterial infections of the oral cavity (e.g. dental caries, plaque or tartar), vagina, urethra, ear, skin, respiratory tract (e.g. cystic fibrosis caused by Pseudomonas aeruginosa), mucosa or eye, as well as for treating systemic infections such as systemic Candida infection. The polypeptide or polynucleotide is also useful for veterinary applications e.g. for treating mastitis. The sequence presented is a cDNA encoding a bovine histatin like polypeptide.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       comprising the polypeptide, is useful for treating (e.g. disorder in a mammal, particularly microbial or fungal in
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Simhes 466;
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                                                       CACATACTTGGAATCAAATATCAATATTTTAAAACATAATAATGATAGTCTCTGGAACTAT
                                                                                                                                                                                              CTACAGGACATGATTAGAGAGATTTTTCACAATGATTTTTCCTACTCTTTCTGTTGTT
                                                                                                                                                                                                                                                                                                                 CAACGATATCCACTAAATTATCCTCCTGCGTATCCATTTCCTTAAAATGCTGCTTAGTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                 CATGATTAGAGCTGATTCATCTGAAGAGAAAACGTCACAGGAAAACGGAAAAAAACATCAT--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGGACTCCACCAAATATGAAGATCTTTATCTTTTGTCTTCATTATGGCTCTCATCCTAGC
                   ATCAAGCATAAAAAAAAAA 604
                                                                                                                  CACATACTTGGAATCCAAATATCAATATTTTAAAACATAATAATGATAGTCTCTGAACTAT
                                                                                                                                                                                                                                                                                              CAACGATATCCACTAAATTATCCTCCTGCGTATCCATTTCCTTAAAATGCTGCTTAGTAA
                                                                                                                                                                                                                                                                                                                                                        TGATAGGTCTCCAGAATTCTTACTAATACAAGAGGATATTTTCAACAATACCAGCCATAT
                                                                                                                                                                                                                                                                                                                                                                                                                CATGATTAGAGCTGATTCATCTGAAGAGAAACGTCACAGGAAAACGCGAAAAAACATCATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCATTATGGCTCTCATCCTAGC
                                                                                                                                                                             CTACAGGACATGATTAGAGAGATTTTTCACAATGATTTTTCCTACTCTTTCTGTTGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BP; 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               70.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; 102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C; 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 423.4; DB 2
Pred. No. 7.7e-82;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             164 T;
                                                                                                                                                                                                                                                                                                                                                                      AGAGGATATTTTCAACAATACCAGCCATAT
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CC candidosis. Also disclosed are compositions comprising the histatin CC polypeptide or polynucleotide, and at least one component consisting of physiological or pharmaceutical carriers or immunostimulants. The CC physiological or pharmaceutical carriers or immunostimulants. The CC histatin polynucleotide, polypeptide, or the cosmetic composition CC comprising the polypeptide, is useful for treating (e.g. gene therapy) a CC disorder in a mammal, particularly microbial or fungal infections. The CC histatin polynucleotide is also useful in genome mapping, physical CC mapping or in the positional cloming of genes. Specifically, the CC polypeptide or polynucleotide is useful for treating fungal or bacterial CC infections of the oral cavity (e.g. dental caries, plaque or tartar), CC vagina, urethra, ear, skin, respiratory tract (e.g. cystic fibrosis CC caused by Pseudomonas aeruginosa), mucosa or eye, as well as for treating systemic infections such as systemic Candida infection. The polypeptide CC or polynucleotide is also useful for veterinary applications e.g. for CC treating mastitis. The sequence presented is the bovine mammary tissue CC cDNA clone which was used to illustrate mRNA expression levels of CC mammary-gland specific sequences.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             The invention discloses isolated histatin polynucleotides and polypeptides, which comprise sequences expressed in bovine. Histatins are histidine rich and specific to the salivary secretions. They are believed to function as part of the non-immune defence system, particularly in the oral cavity and have promise as therapeutic agents in humans with oral
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 New histatin polynucleotides and polypeptides expressed in bovine tissues, useful for treating bacterial or fungal infections in mammals, e.g. infections of the oral cavity, vagina, urethra, ear or skin, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence
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29-OCT-1999; 99US-162701P.
22-AUG-2000; 2000US-0644190.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                CTGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCATTATGGCTCTCATCCTAGC
TCCATTTCCTTAAAATGCTGCTTAGTAACTACAGGACATGATTAGAGAGATTTTTCACAA
                                     AGGATATTTTCAACAATACCAGCCATATCAACGATATCCACTAAATTATCCTCCTGCGTA
                                                                                                                                                                                                                       CATGATTAGAGCTGATTCATCTGAAGAGAAACGTCACAGGAAAACGGAAAAAACATCATAG
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                                                                                                                                                                                                                                                                                                                                  CAGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCATTATGGCTCTCATCCTAGC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Page 15; 17pp; English.
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; 2000US-0644190.
; 2000US-0699146.
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BP;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             89 A; 59 C;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       & DEV CORP LTD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 238.4;
Pred. No. 3.9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             43 G; 76 T; 0 other;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Davis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .9e-42;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB 25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1;
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RESULT 6

Best Local Similarity Matches 121; Conserv

Conservative

Score 115; DB 25; Pred. No. 1.6e-15; 0; Mismatches 10

Query Match

Sequence

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283 T; 0 25; 10;

other;

Length 869; Indels

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The invention discloses isolated histatin polynucleotides and CC polypeptides, which comprise sequences expressed in bovine. Histatins are CC histidine rich and specific to the salivary secretions. They are believed to function as part of the non-immune defence system, particularly in the CC oral cavity and have promise as therapeutic agents in humans with oral CC candidosis. Also disclosed are compositions comprising the histatin CC polypeptide or polynucleotide, and at least one composition of physical or pharmaceutical carriers or immunostimulants. The CC histatin polynucleotide, polypeptide, or the cosmetic composition CC comprising the polypeptide, is useful for treating (e.g. gene therapy) a disorder in a mammal, particularly microbial or fungal infections. The CC histatin polynucleotide is also useful for treating (e.g. gene therapy) a CC mapping or in the positional cloning of genes. Specifically, the CC mapping or in the positional cloning of genes. Specifically, the CC polypeptide or polynucleotide is useful for treating fungal or bacterial CC infections of the oral cavity (e.g. dental caries, plaque or tartar), CC vagina, urethra, ear, skin, respiratory tract (e.g. cystic fibrosis CC caused by Pseudomonas aeruginosa), mucosa or eye, as well as for treating Systemic infections such as systemic Candida infection. The polypeptide CC or polynucleotide is also useful for veterinary applications e.g. for CC treating mastitis. The sequence presented is a cDNA encoding a bovine histatin like polypeptide.
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29-OCT-1999;
22-AUG-2000;
27-OCT-2000;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New histatin polynucleotides and polypeptides expressed in bovine tissues, useful for treating bacterial or fungal infections in malege infections of the oral cavity, vagina, urethra, ear or skin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; Page 12; 17pp; English
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Bystemic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              WPI; 2003-275306/27.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Glenn M,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bos taurus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cow, gene, as, histatin; bovine; salivary secretion; oral cavity; non-immune defence system; oral candidosis; gene therapy; microbial infection; fungal infection; dental caries; plaque; tar cystic fibrosis; systemic infection; Candida infection; mastitis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bovine histatin like polypeptide, #3, cDNA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           P-PSDB;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; 99US-150330P.
; 99US-162701P.
; 2000US-0644190.
; 2000US-0699146.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /product= "Histatin like polypeptide"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Location/Qualifiers
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RESULT 7
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29-OCT-1999;
22-AUG-2000;
27-OCT-2000;
The invention discloses isolated histatin polynucleotides and polypeptides, which comprise sequences expressed in bovine. Histatins are histidine rich and specific to the salivary secretions. They are believed to function as part of the non-immune defence system, particularly in the oral cavity and have promise as therapeutic agents in humans with oral candidosis. Also disclosed are compositions comprising the histatin polypeptide or polynucleotide, and at least one component consisting of physiological or pharmaceutical carriers or immunostimulants. The histatin polynucleotide, polypeptide, or the cosmetic composition
                                                                                                                                                                                                                                                                                                                                                          New histatin polynucleotides and polypeptides expressed in bovine tissues, useful for treating bacterial or fungal infections in mare infections of the oral cavity, vagina, urethra, ear or skin,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cow; gene; as; histatin; bovine; salivary secretion; oral cavity; non-immune defence system; oral candidosis; gene therapy; microbial infection; fungal infection; dental caries; plaque; tartar; cystic fibrosis; systemic infection; Candida infection; mastitis;
                                                                                                                                                                                                                                                                             Claim 1; Page 12; 17pp; English.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Human; secreted protein; expressed sequence tag; EST; haematopoiesis; tissue growth; activin; inhibin; chemotaxis; chemokinesis; haemostatic; receptor; ligand; thrombolytic; anti-inflammatory; cadherin; anti-tumour;
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The polynucleotide, which is a secreted EST, and the encoded prot are predicted to have useful biological activities which would mathem suitable for treating, preventing or ameliorating medical conditions in humans and animals, although no supporting data is given. Suggested activities include nutritional activity, immune stimulating or suppressing activity, haematopoiesis recularing

e tag (EST). ded protein would make

New polynucleotides encoding human secreted proteins - dee.g. human blood, kidney, foetal lung, placenta, testes, ovary, pituitary, retina and colon cDNA libraries.

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                                               Claim 1;
                                                                                         composition for treating assays to quantitatively biological samples -
                                                                                                                                                                                                                                                                                                                                                                                25-MAY-2001; 2001US-293574P.
15-JUN-2001; 2001US-2986988.
29-JUN-2001; 2001US-302277P.
13-JUL-2001; 2001US-305456P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         28-NOV-2002
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                                                                                                                                                                                                                                                                                                                                      (GEST )
                                                                                                                GENSET polynucleotides and polypeptides, useful position for treating GENSET-related disorders and ays to quantitatively determined levels of GENSET
                                                                                                                                                                                                                 2003-129412/12.
DB; ABR48455.
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                                            Page 404-405;
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No. 4.3e-07;
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present

invention relates

to novel human GENSET coding sequences

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The present invention relates to novel GENSET polynucleotides (ABZ36404-ABZ36911) encoding polypeptides (ABP75963-ABP76368). The polynucleotides and polypeptides are useful in screening and diagnostic assays for abnormal GENSET expression and/or biological activity. They are also useful for screening of compounds for treating or preventing GENSET-related disorders, such as heavy metal toxicity, cancer, inflammatory diseases, immune disorders, and the neuromuscular, central nervous system (CNS), cardiovascular or gastrointestinal effects of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 gastrointestinal; gene therapy; GENSET; neavy metal toxicity;
inflammatory disease; immune disorder; neuromuscular; toxicity;
central nervous system; cardiovascular; gastrointestinal; gene;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (ACC51060-ACC51115) and proteins (ABR48453-ABR48508). The GENSET sequences are useful for preparing a composition for treating GENSET-related disorders. They can also be used as markers for tis which the corresponding protein is preferentially expressed, as me weight markers on Southern gels, as chromosome markers or tags to identify chromosomes, and as reagents in assays to quantitatively determined levels of GENSET expression in biological samples.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cytostatic; antiinflammatory; nootropic; neuroprotective; care gastrointestinal; gene therapy; GENSET; heavy metal toxicity;
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the neuromuscular,
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                                                                                                                                                                                        New GENSET polynucleotides and polypeptides, useful for treating heavy metal toxicity, cancer, inflammatory diseases, immune disorders, and the neuromuscular, CNS, cardiovascular or gastrointestinal effects of
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                                                                                                                                              Claim 12; Page 295; 735pp; English.
                                                                                                                                                                                                                                                          WPI; 2003-075548/07.
                                                                                                                                                                                                                                                                                                                                                    18-APR-2001; 2001WO-IB00914
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0; Mismatches
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                                                                         The present invention relates to novel GENSET polynucleotides (AB236404-AB236911) encoding polypeptides (AB75963-ABP76368). The polynucleotides and polypeptides are useful in screening and diagnostic assays for abnormal GENSET expression and/or biological activity. They are also useful for screening of compounds for treating or preventing GENSET-related disorders, such as heavy metal toxicity, cancer, inflammatory diseases, immune disorders, and the neuromuscular, central nervous system (CNS), cardiovascular or gastrointestinal effects of the toxicity. The polynucleotides are useful for constructing or expanding
                                                                                                                                                                                                                                                                                                                                                                                                                                      New GENSET polynucleotides and polypeptides, useful for treating heavy metal toxicity, cancer, inflammatory diseases, immune disorders, and the neuromuscular, CNS, cardiovascular or gastrointestinal effects of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cytostatic, antiinflammatory; nootropic; neuroprotective; cardiant; gastrointestinal; gene therapy; GENSET; heavy metal toxicity; cancer; inflammatory disease; immune disorder; neuromuscular; toxicity; central nervous system; cardiovascular; gastrointestinal; gene; ss.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               18-APR-2001; 2001WO-IB00914
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ABZ36590 standard; cDNA; 438
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       18-APR-2001; 2001WO-IB00914.
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                                                           chromosome
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 170 TAGAAGAAAATTCCAT 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         110
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120 GAATTTCATCTTTCATGACTGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCAT
                                                                                                                                                                                                                                                                                                                                                          12; Page 478; 735pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENSET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          95;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Tanaka H,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (first
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entry)
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69.9%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Dumas Milne Edwards
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Pred. No. 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID
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Matches 95
                                                                        The present invention provides the protein and coding sequences of novel proteins from a variety of organisms, including human, dog, cat, horse, cow, pig, hamster, monkey, macaque, yeast, bacteria, fruit fly, sea urchin and tomatro. These were derived from expressed sequence tags (ESTs) from the organism of interest. They can be used in diagnostics, forensics, gene mapping, identification of mutations, to assess biodiversity and for nutritional purposes. The present sequence is a cDNJ biodiversity and for nutritional purposes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               25-JAN-2000; 2000US-0491404.
17-JUL-2000; 2000US-0617746.
03-AUG-2000; 2000US-0631451.
15-SEP-2000; 2000US-0663870.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; sheep; pig; cow; fruit fly; yeast; hamster; macaque; tomato; monkey; dog; sea urchin; expressed sequence tag; EST diagnostics; forensic test; gene mapping; genetic disorder; biodiversity; gene therapy; nutrition; ss.
                                                                                                                                                                                                                                                                                           Claim 1;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tang YT,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25-JAN-2001; 2001WO-US02687.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                170 TAGAAGAAATTCCAT 185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120 GAATTTCATCTTTCATGACTGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCAT 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EST-derived coding sequence SEQ ID NO:
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                                                                                                                                                                                                                                                                                        Page 537; 1275pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTGGCTCTCATGATTTCCATGATTAGCGCTGATTCACATGAAAAGAGACATCATGGGTA 169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACGGAAAAAACATCAT 255
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Liu C,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Zhou P, kA, Zhang
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                                                                                                                                                       The present invention relates to human lysine-rich statherin protein (LRSP) (AAY94526). The cDNA sequence encoding this protein was identified through analysis of a cDNA library of breast tumour tissue (BRSTNOT14). The LRSP sequence was found to have homology with the DNA of human statherin (the present sequence) and human basic histidine-rich protein (AAY94528). Human statherin is a phosphorocain that acts as an inhibitor of precipitation of calcium phosphate salts in the oral cavity. The LRSP polypeptide and its antagonists may be useful for treating or preventing disorders associated with the activity of LRSP. Such
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Purified polypeptide used for treating or preventing a disorder characterized by expression or activity of lysine-rich statherin
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Sequence
                                                 disorders include autoimmune/inflammatory disorders (for exallergies, asthma, diabetes mellitus), bacterial and fungal and cancers (such as leukemia, adenocarcinoma, melanoma). Aut. RSP may be useful for diagnosis of the above disorders.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Disclosure;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cancer; leukemia; adenocarcinoma; melanoma;
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B₽;
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inflammatory disorder; AIDS;
fungal; bacterial infection;
lanoma; ds.
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0 other;
                                                                                                           (for example AIDS, fungal infection
                                                                                 Antibodies
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RESULT 14
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                    The present sequence represents a human expressed sequence tag (EST). The polynucleotide, which is a secreted EST, and the encoded protein are predicted to have useful biological activities which would make them suitable for treating, preventing or ameliorating medical conditions in humans and animals, although no supporting data is given. Suggested activities include nutritional activity, immune stimulating or suppressing activity, haematopoiesis regulating activity, tissue growth activity, activin/inhibin activity, chemotactic/chemokinetic activity, activity, haemastactory activity, cadherin/tumour invasion suppressor activity, tumour inhibition activity. The polynucleotide may also be useful for gene therapy.
                                                                                                                                                                                                                                                                                                                   Agostino N
Racie LA,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               gene
                                                                                                                                                                                                                                 New polynucleotides encoding human secreted proteins e.g. human blood, kidney, foetal lung, placenta, test ovary, pituitary, retina and colon cDNA libraries.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Human; secreted protein; expressed sequence tag; EST; haematopoiesis; tissue growth; activin; inhibin; chemotaxis; chemokinesis; haemostatic; receptor; ligand; thrombolytic; anti-inflammatory; cadherin; anti-tumour;
                                                                                                                                                                                                                                                                                         WPI; 1999-070077/06.
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                                                                                                                                                                                                        Claim 1; Page 269-270; 618pp; English.
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                                                                                                                                                                                                                                                                                                                  MJ, Jacobs K,
Spaulding V,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGATTAGAGCTGATTCATCTGAAGAGAGAAACGTCACAGGGAAACGGAAAAAACATCATAGAG
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        The present invention relates to human lysine-rich statherin protein (LRSP) (AAY94526). The cDNA sequence encoding this protein was identified through analysis of a cDNA library of breast tumour tissue (BRSTNOT14). The LRSP sequence was found to have homology with human statherin protein (AAY94527) and human basic histidine-rich protein (the present sequence). Human statherin is a phosphoprotein that acts as an inhibitor of precipitation of calcium phosphate salts in the oral cavity. The LRSP polypeptide and its antagonists may be useful for treating or preventing disorders associated with the activity of LRSP. Such disorders include autoimmune/inflammatory disorders (for example AIDS, allergies, asthma, diabetes mellitus), bacterial and fungal infection and cancers (such as leukemia, adenocarcinoma, melanoma). Antibodies to LRSP may be useful
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Lysine-rich statherin protein; LRSP; acidic phosphoprotein; human precipitation inhibitor; autoimmune; inflammatory disorder; ALDS asthma; allergy; diabetes mellitus; fungal; bacterial infection; cancer; leukemia; adenocarcinoma; melanoma; ds.
                                                                                                                                                                                                                                                                 Purified polypeptide used for treating or preventing a disorder characterized by expression or activity of lysine-rich statheria
                                                                                                                                                                                                                     Disclosure;
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leukemia, adenocarcinoma, melanoma).
for diagnosis of the above disorders
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                                                                                                                                                                                                                                                                                                                                                               Corley NC,
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Pred. No. 2.3e-05;
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Best Local :
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144 AGCATCATTCACA 156
                       260 GATATTTTCAACA 272
                                                                             200 TGATTAGAGCTGATTCATCTGAAGAGAAACGTCACAGGAAAACGGAAAAAACATCATAGAG
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Pred. No. 0.00026;
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Search completed: December 13, 2003, Job time : 253 secs 00:19:49

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Result
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Perfect score:
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seq
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length: 2000000000
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1: /cgn2_6/ptodata/1
2: /cgn2_6/ptodata/1
3: /cgn2_6/ptodata/1
4: /cgn2_6/ptodata/1
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Gapop 10.0 , Gapext 1.0
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/cgn2 6/ptodata/1/ina/6B_COMB.seq:*
/cgn2 6/ptodata/1/ina/PCTUS_COMB.seq:*
/cgn2_6/ptodata/1/ina/backfiles1.seq:*
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4 US-09-367-895-29
3 US-08-983-440-29
3 US-08-983-462-1
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7 US-08-973-462-1
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     Sequence 4, Appli
Sequence 29, Appl
Sequence 29, Appl
Sequence 29, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 214, Appli
Sequence 214, Appli
Sequence 47, Appli
Sequence 5, Appli
Sequence 5, Appli
Sequence 13, Appli
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ALIGNMENTS

US-09-468-265-4

GENERAL INFORMATION:

Sequence 4, Application US/09468265 Patent No. 6379928

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CURRENT APPLICATION NUMBER: US/09/468,265
CURRENT FILING DATE: 1999-12-10
PRIOR APPLICATION NUMBER: 08/484,384
PRIOR FILING DATE: 1995-06-07
PRIOR APPLICATION NUMBER: 08/284,942
PRIOR PILING DATE: 1994-08-02
PRIOR APPLICATION NUMBER: 07/413,010
PRIOR APPLICATION NUMBER: 07/413,010
PRIOR PILING DATE: 1989-09-25
PRIOR FILING DATE: 1989-09-25
PRIOR APPLICATION NUMBER: 07/163,219
PRIOR APPLICATION NUMBER: 07/163,219
PRIOR APPLICATION NUMBER: 06/882,224
PRIOR APPLICATION NUMBER: 06/882,224
PRIOR APPLICATION NUMBER: 06/882,224
PRIOR APPLICATION NUMBER: 06/882,224
PRIOR PILING DATE: 1986-07-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: 06/771,374
PRIOR FILING DATE: 1985-08-29
NUMBER OF SEQ ID NOS: 28
SOFTWARE: PatentIn version 3.1
SEQ ID NO 4
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Best Local :
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APPLICANT: Lawlis, Virgil B
TITLE OF INVENTION: Heterologous Polypeptides Expressed in Filamentous Fungi, Process
TITLE OF INVENTION: Making Same and Vectors for Making Same
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APPLICANT: Cullen, Daniel
APPLICANT: Gray, Gregory L
APPLICANT: Hayenga, Kirk J
APPLICANT: Lawlis, Virgil E
                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 1864
TYPE: DNA
ORGANISM: Emericella nidulans
                                                                                                                                                                                                                                                                                                        Local Sim hes 136;
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ÀAGAATTTAATTAATTÄAÄTTÄÄÄATATATÄAATÄTÄGTTGACCTTGAAACTGTTACTAAA 140:
                                                                                                 AACTGAATAATATTAAAGAATAGTATTTATCTAAGTATAACTTAAATCTTAGTAATACTA 1343
                                                                                                                                                 CATATCAACGATATCCACTAAATTATCCTCCTGCGTATCCATTTCCTTAAAATGCTGCTT 340
                                             AGTAACTACAGGACATGATTAGAGAGATTTTTCACAATGATTTTTCCTACTCTTTCTGTT 400
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Pred. No. 0.6;
0; Mismatches 158;
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US-08-981-803-29/c
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       APPLICANT: POULSEN, PETER
TITLE OF INVENTION: INHIBITION OF GENE EXPRESSION
FILE REFERENCE: 674509-2004
CURRENT APPLICATION NUMBER: US/08/981,803
CURRENT FILING DATE: 1997-04-17
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CURRENT APPLICATION NUMBER: US/09/367,895
CURRENT FILING DATE: 1999-12-08
PRIOR APPLICATION NUMBER: PCT/IB98/00270
PRIOR FILING DATE: 1998-02-23
PRIOR APPLICATION NUMBER: GB/9703663.6
PRIOR FILING DATE: 1997-02-21
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 EARLIER
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Solanum tuberosum
PEATURE:
NAME/KEY: CDS
LOCATION: (2132..2209, 3375..3494, 3812..4033, LOCATION: 4753..5022, 5241..6146, 6345..6461, 6
LOCATION: 7026..7133, 7510..7611, 7784..7852, 7
LOCATION: 8321..8437, 9235..9630)
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NUMBER: PCT/EP96/03052
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Pred. No. 1.1;
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6670..6732,
7998..8078,
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SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 29

LENGTH: 11478

TYPE: DNA

ORGANISM: Solanum tuberosum

US-08-981-803-29
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
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CURRENT FILING DATE: 1998-04-17
EARLIER APPLICATION NUMBER: 9514437.4
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EARLIER APPLICATION NUMBER: 951
EARLIER FILING DATE: 1995-07-14
NUMBER OF SEQ ID NOS: 33
                                                                                                                                                                                                                                                                                                                                                                                           EARLIER FILING DATE: 1995-07-14
EARLIER APPLICATION NUMBER: PCT/EP96/03053
EARLIER FILING DATE: 1996-07-12
NUMBER OF SEQ ID NOS: 35
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: POULSEN, Peter TITLE OF INVENTION: INHIBIT FILE REFERENCE: 674509-2003
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LOCATION: (1)..(11478)
OTHER INFORMATION: M 8
                                                                                                                                                                                                                                              FEATURE:
NAME/KEY: variation
LOCATION: (1)..(11478)
OTHER INFORMATION: B stands
                             NAME/KEY: variation
                                                            NAME/KEY: variation LOCATION: (1)..(11478) OTHER INFORMATION: W s
                                                                                                                         OTHER INFORMATION: K stands
                                                                                                                                     NAME/KEY: variation (1)..(11478)
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NAME/KEY: variation
LOCATION: (1)..(11478)
OTHER INFORMATION: R stands
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5. 6232122
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Pred. No. 1.1;
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RESULT 6
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APPLICANT: WALLACH, MICHAEL; PUGATSCH, THEA; MENCHER, DAVID TITLE OF INVENTION: METHOD OF REDUCING THE OUTPUT OF EIMERIA ; OCCYSTS FROM A NEWBORN CHICK NUMBER OF SEQUENCES: 10 CURRENT APPLICATION DATA; APPLICATION NUMBER: US/08/108,763 FILING DATE: 17-AUG-1993 PRIOR APPLICATION DATA;
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                                                                                                                                      ;Patent No.
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Best Local Similarity
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APPLICANT: DAUBERSIES, PIERRE
TITLE OF INVENTION: MALARIAL PRE-ERYTHROCYTIC STAGE POLYPEPTIDE MOLECULES
FILE REFERENCE: 0660-0125-0 PCT
CURRENT APPLICATION NUMBER: US/08/973,462B
CURRENT FILING DATE: 1998-02-06
EARLIER APPLICATION NUMBER: PCT/FR96/00894
EARLIER FILING DATE: 1996-06-12
EARLIER FILING DATE: 1996-06-12
EARLIER FILING DATE: 1996-06-13
NUMBER OF SEQ ID NOS: 29
COMMENCE PROCESSED OF SEQ ID NOS: 29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LENGTH: 6152
TYPE: DNA
ORGANISM: P.
                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
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Pred. No. 1;
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RESULT 8
US-08-973-462-1/c
; Sequence 1, Application
; Patent No. 6191270
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SEQ ID NO:7:
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; APPLICANT: WALLACH, MICHAEL;PUGATSCH, THEA;MENCHER, DAVID
; TITLE OF INVENTION: METHOD OF REDUCING THE OUTPUT OF EIMERIA
; OCCYSTS FROM A NEWBORN CHICK
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Best Local (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NUMBER OF SEQUENCES: 10
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: 642,219
FILING DATE: 16-JAN-1991
APPLICATION NUMBER: 310,603
FILING DATE: 14-FEB-1989
APPLICATION NUMBER: 155,245
FILING DATE: 12-FEB-1988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 155,2
FILING DATE: 12-FEB-1988
APPLICATION NUMBER: 896,6
FILING DATE: 14-AUG-1986
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APPLICATION NUMBER: 310,603
FILING DATE: 14-FEB-1989
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nes 92; Conserv
                                                                                                                                                                                                                                                                                                                                                           LENGTH: 466
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                                                                                            GTGTCTTTGTCGATTCATGTGCATGCATATTCACTTCAAAAAAAGCCCCGCAAAAAATAA 327
                                                                                                                                                      ATCAATATTTTAAAACATAATAATGATAGTCTCTGAACTATGTAATTGGTTTCTACTTTC 544
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14-AUG-1986
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                                                                                                                                                                                        NUMBER OF SEQ ID NOS:
SOFTWARE: FASTSEQ for I
SEG ID NO 214
LENGTH: 789
TYPE: DNA
COGGANISM: Homo sapien
US-09-702-705-214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-702-705-214/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; LENGTH: 6152
; TYPE: DNA
; ORGANISM: P. falciparum
US-08-973-462-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 1
                                                                                                                       Best Local Similarity Matches 133; Conserv
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Best Local Similarity
                                                                                                                                                         Query Match
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APPLICANT:
APPLICANT:
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APPLICANT: DRUBERSIES, PIERRE
APPLICANT: DAUBERSIES, PRE-ERYTHROCYTIC STAGE POLYPEPTIDE MOLECULES
TITLE OF INVENTION: MALASIAL PRE-ERYTHROCYTIC STAGE POLYPEPTIDE MOLECULES
FILE REFERENCE: 0660-0125-0 PCT
CURRENT FILLING DATE: 1996-02-06
EARLIER APPLICATION NUMBER: PCT/FR96/00894
EARLIER FILLNG DATE: 1996-06-12
EARLIER FILLNG DATE: 1996-06-13
NUMBER: PSEQ ID NOS: 29
ENGREER FILLNG DATE: 1995-06-13
NUMBER OF SEQ ID NOS: 29
                                                                                                                                                                                                                                                                                                               APPLICANT: Fan, Liqun
TITLE OF INVENTION: COMPOSITIONS AND METHODS
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C14
CURRENT APPLICATION NUMBER: US/09/702,705
CURRENT FILING DATE: 2000-10-30
                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
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                                                                                    263 ATTTTCAACAATACCAGCCATATCAACGATATCCACTAAATTATCCTCCTGCGTATCCAT 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420 АААТGААТААААСАААGААAAAAAAATCAGTCAAGTTGCACAACACACATACTTGGAAT 479
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       480 CAAATATCAATATTTTAAAACATAATAATGATAGTCTCTGAACTATGTAATTGGTTTCTA
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TTCCTTAAAATGCTGCTTAGTAACTACAGGACATGATTAGAGAGATTTTTCACAATGATT 382
                                                    ATTTTCATTATTACCATCATAATCTTCATAATGAAGAATAATATGATAATGAACATCCAT
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Retter, Marc
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Vedvick, Tom
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Lodes, Michael A.
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ilarity 56.4%;
Conservative
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r, Chaitanya
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Pred. No. 1.4;
0; Mismatches
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                                                                                                                                       Score 40; DB 4; Length 789; Pred. No. 0.91;
                                                                                                                       Mismatches
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                                                                                                                       155; Indels
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TITLE OF INVENTION. COMPOSITIONS AND METHODS FOI
FITTLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C15
CURRENT APPLICATION NUMBER: US/09/736,457
CURRENT FILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 1864
SOFTWARE: FASTSEQ for Windows Version 3.0
SEQ ID NO 214
LENGTH: 789
TYPE: DNA
ORGANISM: Homo sapien
US-09-736-457-214
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Best Local Similarity
Matches 133; Conserv
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -09-736-457-214/c
Sequence 214, Application US/09736457
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                                         503
                                                                                                                                                                         403 ATTGCTATCTTCCTCTTGACTTTCTACAAGGTCTTTAATCTTTACAAAGTTTTGTATATT 344
                                                                                                                                                                                                               383
                                                                                                                                                                                                                                                         463 GCACATAACCCCTTGTATCTCTTCATGAATGTTTCCTTAGGGTAAGTTCTTAGAAGTGAA 404
                                                                                                                                                                                                                                                                                                   323 TTCCTTAAAATGCTGCTTAGTAACTACAGGACATGATTAGAGAGATTTTTCACAATGATT
                                                                                                                                                                                                                                                                                                                                          523 ATTTTCATTATTACCATCATAATCTTCATAATGAAGAATAATATGATAATGAACATCCAT
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                                                                                   GAAAAAGACAAGCTCTTATTGAACACATAGTAGGTGCAATTTACCAGCATAGGCAGAGGA 284
                                         Fanger, Gary
Vedvick, Tom
Carter, Darrick
Retter, Marc
Mannion, Jane
                                                                                                                           ANATCAGTCAAGTAGTTGCACAACACATACTTGGAATCAAATATCAATATTTTAAAACAT 502
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GGTTATATAAGGTTGAACATTTCTTTGTCTATATTGACTTTGTAATCT
                                                                                                                                                                                                             TTTCCTACTCTTTCTGTTGTGTGAAAACCATCTTTCAAATGAATAAAACAAAGAAAAA 442
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Wang, Aijun
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Lodes, Michael
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46.2%; Pred. No. 0.91;
ative 0; Mismatches 155; Indels
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  236
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RESULT 11 US-09-417-485D-7/c

GENERAL INFORMATION:

Sequence 7, Application US/09417485D Patent No. 6541202

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RESULT 12
US-09-482-273-47/c
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, NAME/KEY: CDS
; LOCATION: (1)..(2382)
; OTHER INFORMATION: Partial TERT gene
US-09-417-485D-7
                                                                                                                                                                                                                                          SOFTWARE: PatentIn Ver. 2.0 SEQ ID NO 47
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Patent No. 653463
                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/09/482,273
CURRENT FILING DATE: 2000-01-13
EARLIER APPLICATION NUMBER: PCT/US99/15849
EARLIER FILING DATE: 1999-07-14
EARLIER APPLICATION NUMBER: 60/092,921
EARLIER FILING DATE: 1998-07-15
EARLIER FILING DATE: 1998-07-15
EARLIER FILING DATE: 1998-07-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/09/417,485D CURRENT FILING DATE: 2002-06-14 NUMBER OF SEQ ID NOS: 49
                                                                                                                                                                                                                                                                        EARLIER APPLICATION NUMBER: 60/092,956
EARLIER FILING DATE: 1998-07-15
NUMBER OF SEQ ID NOS: 267
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APPLICANT: Love, Ruschelle A.
TITLE OF INVENTION: Telomerase Reverse Transcriptase (TERT) Genes
FILB REFERENCE: 47714-5009-US
                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REFERENCE: PZ030P1
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TITLE OF INVENTION: 71 Human Secreted Proteins
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                                                                LOCATION: (5892)
OTHER INFORMATION:
                                                                                                                                              NAME/KEY: SITE
LOCATION: (574
                                                                                                                                                                               ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                                                                            TYPE: DNA
                                  NAME/KEY:
                                                                                                                               OTHER INFORMATION:
COCATION: (5896)
OTHER INFORMATION:
                                                                                               NAME/KEY: SITE
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                                                                                                                                                 (5749)
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US-09-417-485D-5/c
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; LOCATION: (5966)
; OTHER INFORMATION:
US-09-482-273-47
                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 49
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 5, Application US/09417485D Patent No. 6541202
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Best Local Similarity
                                                                                                                                                                                 Matches
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILE REFERENCE: 47714-5009-US CURRENT APPLICATION NUMBER: US CURRENT FILING DATE: 2002-06-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Long, David M.
APPLICANT: Metz, Anneke M.
APPLICANT: Love, Ruschelle A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TITLE OF INVENTION: Telomerase Reverse Transcriptase (TERT) Genes
                                                                                                                                                                                                                                    NAME/KEY: unsure
LOCATION: (1821).. (1837)
OTHER INFORMATION: m at position 1821 = a or c; w at position 1837
OTHER INFORMATION: a or t. Xaa (amino acid) at position 330 = Leu
OTHER INFORMATION: Ile; Xaa at position 335 = Asp or Gly.
                                                                                                                                                                                                                                                                                                                                             NAME/KEY: CDS
LOCATION: (834)..(7
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 10640
TYPE: DNA
ORGANISM: Plasmodium falciparum
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LOCATION: (590
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7544 ATAATAGAATGTATAAAAT 7526
                                                                                447 CAGTCAAGTAGTTGCACAACACATACTTGGAATCAAATATCAATATTTTAAAACATAATA 506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 492 TTTTAAAACATAATAATGATÄGTCTCTGAACTATGTAATTGGTTTCTTCTTTCTT 546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         432 CAAAGAAAAAAAATCAGTCAAGTAGTTGCACAACACATACTTGGAATCAAATATCAATA 491
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                            ATGATAGTCTCTGAACTAT 525
                                                                                                                                                (834)..(7385)
RMATION: TERT gene
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Pred. No. 1
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RESULT 15
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TITLE OF INVENTION: Telomerase Reverse Transcriptase (TERT) Genes FILE REFERENCE: 47714-5009-US CURRENT APPLICATION UNMERR: US/09/417,485D CURRENT FILING DATE: 2002-06-14 NUMBER OF SEQ ID NOS: 49 SOFTWARE: PatentIn Ver. 2.1 SEQ ID NO 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 5, Application US/09417485D Patent No. 6541202
                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 13,
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APPLICANT: Metz, Anneke M.
APPLICANT: Love, Ruschelle A.
                                                                                                                                                                                                                                                                                                                                                                                                          atent No. 5993827
GENERAL INFORMATION:
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LOCATION: (1821). (1837)
OTHER INFORMATION: m at position 1821 = a or c; w at position 1837
OTHER INFORMATION: a or t. Xaa (amino acid) at position 330 = Leu
OTHER INFORMATION: Ile; Xaa at position 335 = Asp or Gly.
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LOCATION: (834)..(7385)
OTHER INFORMATION: TERT gene
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APPLICANT:
APPLICANT:
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                                                                                                                                                                                                                               APPLICANT: Su, Xin-Shaun
APPLICANT: Wellems, Thomas E.
TITLE OF INVENTION: BINDING DOMAINS FROM PLASMODIUM VIVAX
TITLE OF INVENTION: AND PLASMODIUM FALCIPARUM ERYTHROCYTE BINDING PROTEINS
NUMBER OF SEQUENCES: 45
                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                           CORRESPONDENCE ADDRESS
                                                                                                                                 ADDRESSEE: Knobbe Martens Olson & Bear
STREET: 620 Newport Center Drive 16th
CITY: Newport Beach
STATE: California
                 COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                               COUNTRY:
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                                                                                                                                                                                                                                                                                                                                              Sim, Kim L.
Chitnis, Chetan
Miller, Louis H.
                                                                                                                                                                                                                                                                                                                            Peterson, David S.
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PatentIn Release #1.0, Version #1.25
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Pred. No. 2.2;
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Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEPHONE: (619) 235-859
TELEFAX: (619) 235-0176
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                               MOLECULE TYPE:
HYPOTHETICAL: N
ANTI-SENSE: NO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME: Israelsen, Ned
REGISTRATION NUMBER: 29,655
REGERENCE/DOCKET NUMBER: NII
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
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                                                                                                                                                6404 AAAAACATTTTTÄATTÄATATAATAATAATATAATAATAATAATATTTTTCCTGTTATTTA 6463
                                                                                                                                                                                                                       6350 TTGAĀĀTTCĀTAĀĀATGCĀTGAAATACA-----TAĀAAAAATACAACĀĀAACAAATGAT 6403
                                                                                                                                                                                                                                                                                               6524 ACAAAATTAA 6534
                                                                       6464 TTTATCATTTTTTTTTTGATGCTATATATATTATTATATAATAAAATTATAATAATATAACA 6523
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                                594 ТАЛАЛАЛАЛА 604
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                                                                                                                                                                                                                                                                                                                                                                                      6.5%; Score 39; DB 2; Length 19124; 53.0%; Pred. No. 3.6;
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Search completed: December 13, 2003, 01:36:48
Job time : 67 secs

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Result
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Maximum Match 100%
Listing first 45 s
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seq length: 2000000000
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1: /cgn2 6/ptodata/2/pubpna/US07 PUBCOMB.seq:*
2: /cgn2 6/ptodata/2/pubpna/PCT NEW PUB.seq:*
3: /cgn2 6/ptodata/2/pubpna/US06 NEW PUB.seq:*
4: /cgn2 6/ptodata/2/pubpna/US07 NEW PUB.seq:*
5: /cgn2 6/ptodata/2/pubpna/US07 NEW PUB.seq:*
6: /cgn2 6/ptodata/2/pubpna/US07 NEW PUB.seq:*
6: /cgn2 6/ptodata/2/pubpna/US08 NEW PUB.seq:*
7: /cgn2 6/ptodata/2/pubpna/US08 PUBCOMB.seq:*
8: /cgn2 6/ptodata/2/pubpna/US09 PUBCOMB.seq:*
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Match Length DB
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   US-10-079-754A-4
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US-10-079-754A-15
US-10-079-754A-15
US-10-079-623-200
US-10-079-754A-3
US-10-079-754A-3
US-10-079-754A-5
US-09-992-600A-5
US-09-992-600A-5
US-09-992-05B-5
US-09-992-05B-5
US-09-999-570-5
US-09-999-570-5
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Sequence 4, Appli
Sequence 1, Appli
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-10-311-455	US-10-240-453-210	US-10-311-455-1916	-10-311-455-	US-10-311-455-1936	US-10-239-676-95	US-10-240-453-107		US-09-814-353-10853	US-09-814-353-4552	٥	-31	US-10-172-086-19	-311	-311-455-20	311	US-10-311-455-57	US-10-311-455-1451 .	US-10-312-841-1	311-459	US-10-311-455-934	US-10-312-841-2	US-10-311-455-1358	US-10-027-632-263849	US-10-027-632-263848	US-10-027-632-263847	US-10-027-632-263849	US-10-027-632-263848	US-10-027-632-263847	US-10-000-986-5
1512,	210, A		1369,	1936		107,	2214,		4552	Sequence 236, App	739,	19,	750,		962,	57,	1451	Sequence 1, Appli	271,	934,	Sequence 2, Appli	1358		Sequence 263848,		ው	26	e 263	Sequence 5, Appli

US-10-079-754A-4 US-10-079-754A-4 PRIOR APPLICATION NUMBER: US 09/699,146
PRIOR FILLING DATE: 2000-10-27
PRIOR PELICATION NUMBER: US 60,162,701
PRIOR FILLING DATE: 1999-10-29
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR FILLING DATE: 2000-08-22
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR FILLING DATE: 1999-08-23
NUMBER OF SEQ ID NOS: 15 Sequence 4, Application US/10079754A Publication No. US20020164625A1 GENERAL INFORMATION: SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 4 FILE REFERENCE: 11000.1068
CURRENT APPLICATION NUMBER: US/10/079,754A
CURRENT FILING DATE: 2002-02-19 APPLICANT: Glenn, Matthew APPLICANT: Grigor, Murray R. APPLICANT: Molenaar, Adrian J. APPLICANT: Davis, Stephen R. TITLE OF INVENTION: Compositions Isolated from Bovine TITLE OF INVENTION: Mammary Gland and Methods for Th LENGTH: 604
TYPE: DNA
ORGANISM: Bovine for Their Use

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Query Match Best Local S Matches 604

Local Similarity les 604; Conserv

Conservative

100.0%; Score 604; DB 14; 100.0%; Pred. No. 4.4e-126; tive 0; Mismatches 0;

Length

604; 0

Gaps

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; LENGTH: 505
; TYPE: DNA
; ORGANISM: Bovine
US-10-079-754A-1
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APPLICANT: Davis, Stephen R.
APPLICANT: Davis, Stephen R.
TITLE OF INVENTION: Compositions Isolated from Bovine
TITLE OF INVENTION: Mammary Gland and Methods for Their Use
FILE REFERENCE: 11000.1068
CURRENT APPLICATION NUMBER: US/10/079,754A
CURRENT FILING DATE: 2002-02-19
PRIOR APPLICATION NUMBER: US 09/699,146
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR FILING DATE: 1999-10-29
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR FILING DATE: 1999-08-23
PRIOR FILING DATE: 1999-08-23
PRIOR FILING DATE: 1999-08-23
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US-10-079-754A-1
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APPLICANT: Glenn, Matthew
APPLICANT: Grigor, Murray
APPLICANT: Molenaar, Adri
APPLICANT: Davis, Stepher
                                                                                                                        NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 1, Application US/10079754A Publication No. US20020164625A1
 Best Local Similarity
                Query Match
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77.1%;
99.8%;
Score 465.4; DB Pred. No. 6e-95;
                  14;
                  Length
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APPLICANT: Grigor, Murray R.
APPLICANT: Molenaar, Adrian J.
APPLICANT: Molenaar, Adrian J.
APPLICANT: Davis, Stephen R.
TITLE OF INVENTION: Compositions Isolated from Boy
TITLE OF INVENTION: Mammary Gland and Methods for
FILE REFERENCE: 11000.1068
CURRENT APPLICATION UNMBER: US/10/079,754A
CURRENT FILING DATE: 2002-02-19
PRIOR APPLICATION NUMBER: US 09/699,146
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR FILING DATE: 1999-10-29
PRIOR FILING DATE: 1999-10-29
PRIOR APPLICATION NUMBER: US 60,163,330
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR FILING DATE: 1999-08-23
                                                                                                                       ; TYPE: DNA
; ORGANISM: Bovine
US-10-079-754A-2
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US-10-079-754A-2
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SOFTWARE: FastSEQ for
SEQ ID NO 2
LENGTH: 585
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                                                                         Query Match
Best Local
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                                                           Score 448.2; DB 14; Pred. No. 4.7e-91; 0; Mismatches 3;
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US-10-079-754A-6
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CURRENT FILING DATE: 2002-02-19
PRIOR APPLICATION NUMBER: US 09/699,146
PRIOR FILING DATE: 2000-10-27
PRIOR PELICATION NUMBER: US 60,162,701
PRIOR FILING DATE: 1999-10-29
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR PILING DATE: 2000-08-22
PRIOR PILING DATE: 1999-08-23
PRIOR PILING DATE: 1999-08-23
PRIOR PILING DATE: 1999-08-23
PRIOR PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR PILING DATE: 1999-08-23
NUMBER: OF SEQ. ID NOS: 15
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SEQ ID NO 6
LENGTH: 525
TYPE: DNA
ORGANISM: Bovine
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 6, Application US/10079754A Publication No. US20020164625A1
                                                                                                                                     Query Match
Best Local Similarity
Matches 466; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Glenn, Matthew
APPLICANT: Grigor, Murray R.
APPLICANT: Molenaar, Adrian J.
APPLICANT: Davis, Stephen R.
TITLE OF INVENTION: Compositions Isolated from
TITLE OF INVENTION: Mammary Gland and Methods
FILE REFERENCE: 11000.1068
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                                      Conservative
                                                                                                                                                 70.1%;
93.4%;
                                                                                                                                        0;
                                                                                                                                      Score 423.4; DB 1
Pred. No. 1.7e-85;
0; Mismatches 1
----AGAGGATATTTTCAACAATACCAGCCATAT
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for Their Use
                                                                                                                                                               14;
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                                                                                                                                                               Length
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; ORGANISM: Bovine
US-10-079-754A-15
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US-10-079-754A-15
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APPLICANT: Molenan J.

APPLICANT: Davis, Stephen R.

APPLICANT: Davis, Stephen R.

TITLE OF INVENTION: Compositions Isolated from Bovine

TITLE OF INVENTION: Compositions Isolated for Their

FILE REFERENCE: 11000.1068

CURRENT APPLICATION NUMBER: US/10/079,754A

CURRENT FILING DATE: 2002-02-19

PRIOR APPLICATION NUMBER: US 09/699,146

PRIOR APPLICATION NUMBER: US 60,162,701

PRIOR APPLICATION NUMBER: US 60,162,701

PRIOR FILING DATE: 1999-10-29

PRIOR FILING DATE: 1999-10-29

PRIOR APPLICATION NUMBER: US 09/644,190

PRIOR APPLICATION NUMBER: US 09/643

PRIOR APPLICATION NUMBER: US 09/643

PRIOR APPLICATION NUMBER: US 60,150,330

PRIOR APPLICATION NUMBER: US 60,150,330

PRIOR FILING DATE: 1999-08-23

PRIOR APPLICATION NUMBER: US 60,150,330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 15, Application US/10079754A Publication No. US20020164625A1 GENERAL INFORMATION:
APPLICANT: Glenn, Matthew APPLICANT: Grigor, Murray R.
                                                                                                                                                                                                                                                                                Query Match 39.5
Best Local Similarity 99.6
Matches 239; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 15
SOFTWARE: FRATSEQ for Windows
SEQ ID NO 15
LENGTH: 267
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AGGATATTTTCAACAATACCAGCCATATCAACGATATCCACTAAATTATCCTCCTGCGTA 317
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Pred. No. 5e-44;
0; Mismatches
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Gaps

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APPLICANN: Davis, Stephen R.
TITLE OF INVENTION: Compositions Isolated from Bov
TITLE OF INVENTION: Compositions Isolated from Bov
TITLE OF INVENTION: Mammary Gland and Methods for
FILE REFERENCE: 11000.1068
CURRENT APPLICATION NUMBER: US/10/079,754A
CURRENT FILING DATE: 2002-02-19
PRIOR APPLICATION NUMBER: US 09/699,146
PRIOR FILING DATE: 2000-10-27
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR APPLICATION NUMBER: US 90/644,190
PRIOR FILING DATE: 1999-10-29
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR APPLICATION NUMBER: US 60,150,330
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US-10-079-754A-3
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; ORGANISM: Bovine
US-10-079-623-200
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US-10-079-623-200
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APPLICANT: Glenn, Matthew
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 200
LENGTH: 267
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Publication No.
      SEQ ID
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Best Local Similarity
Matches 239; Conserv
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TITLE OF INVENTION: Compositions isolated from bovine
TITLE OF INVENTION: mammary gland and methods for their use.
FILE REFERENCE: 11000 10144c3
CURRENT APPLICATION NUMBER: US/10/079,623
CURRENT FILING DATE: 2002-02-19
                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Grigor, Murray R. APPLICANT: Molenaar, Adrian J. APPLICANT: Davis, Stephen R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Havukkala, Ilkka J. APPLICANT: Glenn, Matthew APPLICANT: Grigor, Murray R. APPLICANT: Molenaar, Adrian J
                         NUMBER OF SEQ ID NOS: 15
SOFTWARE: FastSEQ for Windows Version 4.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   258 AGGATATTTTCAACAATACCAGCCATATCAACGATATCCACTAAATTATCCTCCTGCGTA 317
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for Their Use
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                                                                                                                                      US-09-992-600A-5
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT APPLICATION NUMBER: US/10/079,754A
CURRENT FILING DATE: 2002-02-19
PRIOR APPLICATION NUMBER: US 09/699,146
PRIOR FILING DATE: 2000-10-27
PRIOR APPLICATION NUMBER: US 60,162,701
PRIOR FILING DATE: 1999-10-29
PRIOR FILING DATE: 1999-10-29
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR APPLICATION NUMBER: US 09/644,190
PRIOR APPLICATION NUMBER: US 60,150,330
PRIOR FILING DATE: 1999-08-23
PRIOR FILING DATE: 1999-08-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-079-754A-5
                                                                   Sequence 5, Application US/09992600A Publication No. US20030027161A1 GENERAL INFORMATION:
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Best Local Similarity
Matches 121; Conserv
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SOFTWARE: FastSEQ for
SEQ ID NO 5
LENGTH: 96
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Best Local Similarity
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APPLICANT: Benjanin, Stephane
APPLICANT: Tanaka, Hiroaki
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FILE REFERENCE: 11000.1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: Compositions Isolated from TITLE OF INVENTION: Mammary Gland and Methods
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APPLICANT: Grigor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Bovine
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                                                                                                                                                                                                                                                         325 CCTTAAAATGCTGCTTAGTAACTACAGGACATGAT
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Pred. No. 3.
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3.5e-10;
thes 5;
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for Their Use
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Best Local Similarity
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                    CURRENT FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR FILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/298,698
PRIOR FILING DATE: 2001-06-15
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PRIOR FILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/298,698
PRIOR FILING DATE: 2001-06-15
                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/924,340
CURRENT FILING DATE: 2001-08-06
                                                                                                                                                                                                APPLICANT: Bejanin, Stephane
APPLICANT: Tanaka, Hiroaki
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.US2.REG
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PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: PCT/IB01/01715
PRIOR FILING DATE: 2001-08-06
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CURRENT APPLICATION NUMBER: US/09/992,600A
CURRENT FILING DATE: 2001-11-13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rype: DNA
ORGANISM: Homo sapiens
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OCATION: 397..402
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APPLICATION NUMBER: US 60/293,574
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                                                                                                                                                                                                            SOFTWARE: JPatent
SEQ ID NO 5
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NUMBER OF SEQ ID NOS: 112
SOFTWARE: JPatent
SEQ ID NO 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 11.7%;
Best Local Similarity 69.9%;
Matches 95; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT FILING DATE: 2003-02-20
PRIOR APPLICATION NUMBER: US 09/924,340
PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: PCT/IB01/01715
PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR PILING DATE: 2001-07-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: TANAKA, HİYOAKİ
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.US5.DIV
CURRENT APPLICATION NUMBER: US/09/992,095B
CURRENT FILING DATE: 2003-02-20
                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: US 60/293,574
PRIOR FILING DATE: 2001-05-25
NUMBER OF SEQ ID NOS: 112
                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR FILING DATE: 2001-66-29
PRIOR APPLICATION NUMBER: US 60/298,698
PRIOR FILING DATE: 2001-06-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Benjanin, Stephane
APPLICANT: Tanaka, Hiroaki
                                                                                                                                                                      LENGTH:
               NAME/KEY: CDS
LOCATION: 84..317
                                                         FEATURE:
                                                                                                   FEATURE:
NAME/KEY: 5'UTR
                                                                                                                                             ORGANISM: Homo sapiens
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ORGANISM: Homo sapiens
FEATURE:
                                                                               OCATION: 1..83
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423..438
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Pred. No. 3.8e-06;
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Best Local Similarity
Matches 95; Conserv
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Query Match
Best Local Similarity
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APPLICANT: Tanaka, Hiroaki
TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 182.US1.REG
CURRENT APPLICATION NUMBER: US/10/154,678
CURRENT FILING DATE: 2002-10-15
PRIOR APPLICATION NUMBER: US 09/924,340
PRIOR FILING DATE: 2001-08-06
PRIOR FILING DATE: 2001-08-06
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PRIOR FILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR FILING DATE: 2001-06-29
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TYPE: DNA
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LOCATION: 423..438
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LOCATION: 423..438
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                                                                                                                                         NAME/KEY: polyA_signal
LOCATION: 397..402
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LOCATION: 318..438
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LOCATION: 1..83
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11.7%;
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Pred. No. 3.8e-06;
0; Mismatches 41;
Score 70.4; DB 13; Pred. No. 3.8e-06;
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LENGTH: 4:
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PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: PCT/IB01/01715
PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR APPLICATION NUMBER: US 60/302,277
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CURRENT APPLICATION NUMBER: US/09/999,570
CURRENT FILING DATE: 2001-06-14
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION NUMBER: US 60/293,574
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ORGANISM: Homo sapiens
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LOCATION: 423..438
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LOCATION: 1..83
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ITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                           OCATION: 318..438
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OCATION: 84..317
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110 CTTGGCTCTCATGATTTCCATGATTAGCGCTGATTCACATGAAAAGAGACATCATGGGTA
                                 180 TATGGCTCTCATCCTAGCCATGATTAGAGCTGATTCATCTGAAGAGAAACGTCACAGGAA 239
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Pred. No. 3.8e-06;
0; Mismatches 41;
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US-10-001-142-5
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SOFTWARE: JPatent
SEQ ID NO 5
                                                                                                                                                                                                                                       Sequence 5, Application US/10000489 Publication No. US20030092011A1 GENERAL INFORMATION:
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Best Local Similarity 69.9%;
Matches 95; Conservative
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Publication No. US20030198954A1
            APPLICANT: Benjanin, Stephane
APPLICANT: Tanaka, Hiroaki
TITLE OP INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.US6.DIV
CURRENT APPLICATION NUMBER: US/10/000,489
CURRENT FILING DATE: 2001-11-14
PRIOR APPLICATION NUMBER: US 09/924,340
PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US 09/924,340
PRIOR APPLICATION NUMBER: US 09/924,340
PRIOR APPLICATION NUMBER: US 09/924,340
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PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: PCT/IB01/01715
PRIOR FILING DATE: 2001-08-06
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR FILING DATE: 2001-07-13
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TITLE OF INVENTION: HUMAN CDNAS AND PROTEINS AND USES THEREOF
FILE REFERENCE: 91.U97.DIV
CURRENT APPLICATION NUMBER: US/10/001,142
CURRENT FILING DATE: 2001-11-14
CURRENT FILING DATE: 2001-11-14
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APPLICANT: Tanaka, Hiroaki
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ORGANISM: Homo sapiens
FILING DATE:
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2001-08-06
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Pred. No. 3.8e-06;
0; Mismatches 41;
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PRIOR APPLICATION NUMBER: US 60/305,456
PRIOR FILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: US 60/302,277
PRIOR FILING DATE: 2001-66-29
PRIOR APPLICATION NUMBER: US 60/298,698
PRIOR FILING DATE: 2001-06-15
PRIOR APPLICATION NUMBER: US 60/293,574
PRIOR APPLICATION NUMBER: US 60/293,574
PRIOR APPLICATION NUMBER: US 60/293,574
PRIOR FILING DATE: 2001-05-25
NUMBER OF SEQ ID NOS: 112
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Best Local Similarity 69.9%;
Matches 95; Conservative
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LOCATION: 84..317
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170 TAGAAGAAATTCCAT 185
                                                                                                                                                                                         120 GAATTTCATCTTTCATGACTGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCAT 179
                                        240 ACGGAAAAAACATCAT 255
                                                                                 110 CTTGGCTCTCATGATTTCCATGATTAGCGCTGATTCACATGAAAAGAGACATCATGGGTA 169
                                                                                                          180 TATGGCTCTCATCCTAGCCATGATTAGAGCTGATTCATCTGAAGAGAAACGTCACAGGAA 239
                                                                                                                                                                  50 GACTCTCCTCTTGAGTAAAAGGACTCAGCCAACTATGAAGTTTTTTGTCTTTTGCTTTAGT 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       438
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                                                                                                                                                                                                                                                 0;
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Pred. No. 3.8e-06;
0; Mismatches 41;
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Gaps

Search completed: December 13, 2003, 01:41:34 Job time : 284 secs

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Result
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Maximum DB
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Maximum Match 100%
Listing first 45 summaries
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                                                               Score
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Match Length DB
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7871.262 Million cell updates/sec
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gb_est1:*
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Copyright (c) 1993 - 2003 Compugen Ltd.
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792
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 CB985810
CB957544
CB986888
CB958289
                                                                                                    SUMMARIES
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CB985810 AGENCOURT
CB957544 AGENCOURT
CB986888 AGENCOURT
CB958289 AGENCOURT
                                                             Description
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957940	В9579	14	547	12.7	77	-
957523	95752	14	547	12.7	77	
957440	B95744	14	547	12.7	77	_
957414 AG	5741	14	547	12.7	77	
957280	9572	14	547	12.7	77	
57224	95722	14	547	12.7	77	_
956877	B95687	14	547	12.7	77	_
56860	B95686	14	547	12.7	77	_
56536	B956	14	547	12.7	77	_
56487	5648	14	547	12.7	77	٠.
B956188	5618	14	547	12.7	77	•
B955720	95572	14	547	12.7	77	-
B987595	8759	14	546	12.7	77	
B987123	8712	14	546	12.7	77	
B986417	8641	14	546	12.7	77	•
986281	8	14	546	12.7	77	Ī
985184	8518	14	546	12.7	77	_
957972	5797	14	546	12.7	77	_
B957121	B95712	14	546	12.7	77	_
B956449	B956	14	546	12.7	77	
B956307	B95630	14	546	12.7	77	•
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B959166	B95916	14	544	•	77	
B957223	B95722	14	544	•	77	•
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B958523 AG	B95852	14	543	12.7	77	_
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85159	B98515	14	533	•	77	_
86478 AGENCOU	8647	14	527		77	•
283872 RX2838	8387	13	390	•	77	•
76689 EST8	76	o.	348	12.7	77	
76704 EST8916	7670	9	330	٠		_
82524 EST9574	8252	9	327	•	77	
76700 EST8	767	9	312	•	77	
987175 AGENO	დ-	14	773			_
85714 Homo sap	7	N	622		•	_
485825 Homo sapi	M076	N	583	12.8	77.6	_
987745	B98774	14	929			_
985521	985	14	831	13.0	78.6	•
CB984475 AGENCOURT	447	14	793	13.0	78.6	•

ALIGNMENTS

	COMMENT	JOURNAL	TITLE	REFERENCE		ORGANISM	SOURCE	KEYWORDS	VERSION	ACCESSION	DEFINITION	LOCUS	RESULT 1 CB985810
Email: cgapbs-r@mail.nih.gov Tissue Procurement: Dr. Michael Brownstein and Dr. Miklos Palkovits cDNA Library Preparation: CLONTECH Laboratories, Inc. cDNA Library Preparation: CLONTECH Laboratories cDNA Sequencing by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Agencourt Bioscience Corporation Clone distribution: MCC clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov plate: NDCM143 row: b column: 08 High quality sequence stop: 553.	Contact: Robert Strausberg, Ph.D.	Unpublished	NIH-MGC http://mgc.nci.nih.gov/. National Institutes of Health. Mammalian Gene Collection (MGC)	1 (bases 1 to 553)	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.	Homo sapiens	Homo sapiens (human)	EST.	CB985810.1 GI:30280334	LIMAGE:30323983 5°, mkNA sequence. CB985810	T 13647469 NIH MGC 184 Homo sapiens cDNA clo	CB985810 553 bp mRNA linear EST 01-MAY-2003	

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SOURCE
ORGANISM
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CB957544
                                                                                                                                                                                                                                                                                                                                    REFERENCE
AUTHORS
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VERSION.
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JOURNAL
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        62
                                                                                                                 Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Michael Brownstein and Dr. Miklos Pa
cDNA Library Preparation: CLONTECH Laboratories, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 546 bp n
AGENCOURT 13785762 NIH MGC 184 Homo
IMAGE:30352504 5', mRNA sequence
CB95744
Plate: NDCM151 row: 1 column: 17
High quality sequence stop: 546.
Location/Qualifiers
                                                                                                                                                                                                                                                                                                    1 (bases 1 to 546)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Primates;
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                                                                       found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
                                                                                                                                                                                                                                                             Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                     Unpublished
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CB957544.1 GI:30213661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GATATTTTCAACAATACCAGCCATATCAACGATATCCACTAAATTATCCTCCTGCGTATC 319
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGATTAGAGCTGATTCATCTGAAGAGAAACGTCACAGGAAAACGGAAAAAACATCATAGAG 259
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sfil (ggccattatggcc); Site_2: Sfil (ggccgcttggcc);
Library is oligo-dT primed and directionally cloned. cDNA
was prepared from a glandular pool of tissues from thyoid,
parathyroid, adrenal, cortex and pineal gland. 5' and 3'
adaptors were used in cloning as follows: 5' adaptor
sequence: 5'-CACGGCCATRATGGCC-3' and 3' adaptor sequence:
5'-ATTCTAGAGGCCGAGGCGACATG-dT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size 1.38
kb (range 0.60-3.5 kb). 15/15 colonies contained inserts
by PCR. This library was enriched for full-length clones
and was consetructed by Clontech Laboratories (Palo Alto,
CA). Note: this is a NIH MGC Library."
71 a 117 c 81 g 183 t 1 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /clone="IMAGE:30329983"
/lab_host="DH10B (T1 phage-resistant)"
/clone_lib="NIH_MGC_184"
/note="Organ: Pooled-Glandular; Vector: pDNR-LIB;
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/db_xref="taxon:9606"
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Pred. No. 0.02
0; Mismatches
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BASE COUNT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           151;
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Michael Brownstein and Dr. Miklos Pa
cDNA Library Preparation: CLONTECH Labboratories, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
                                                                                                                                                                                  Unpublished Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                         Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (bases 1 to 555)

NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                                                                                                                                           EST
                                                                                                                                                                                                                                                                                                                                                                                                                                   CB986888
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AGENCOURT 13650592 NIH MGC 184 Hc
IMAGE:30329446 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                               Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                              CB986888.1 GI:30281408
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TAGAAGAAATTCCAT-----GAAAAGCATCATTCACATCGAGAATTTCCATTTTATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACGGAAAAAACATCATAGAGGATATTTTCAACAATACCAGCCATATCAACGATATCCACT 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACTCTCCTCTTGAGTAAAAGGACTCAGCCAACTATGAAGTTCTTTGTCTTTGCTTTAGT
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                                                                                                                                                                                                                                                                                                                                                                    sapiens (human)
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Library is oligo-dT primed and directionally cloned. cDNA
was prepared from a glandular pool of tissues from thyoid,
parathyroid, adrenal, cortex and pineal gland. 5' and 3'
adaptors were used in cloning as follows: 5' adaptor
sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence:
5'-ATTCTAGAGCCGAGGCCGACCTG-dT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size 1.38
kb (range 0.60-3.5 kb). 15/15 colonies contained inserts
by PCR. This library was enriched for full-length clones
and was constructed by Clontech Laboratories (Palo Alto,
CA). Note: this is a NIH MGC Library."

66 a 103 c 87 g 189 t 1 others
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/clone_lib="NIH_MGC_184"
/note="Organ: Pooled-Glandular; Vector: pDNR-LIB; Site_1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /mol_type="mRNA"
/db_xref="taxon:9606"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                mRNA linear ES'
sapiens cDNA clone
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                                                                                                                                          Miklos Palkovits
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JOURNAL COMMENT
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AUTHORS
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LOCUS
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ORGANISM
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                                                                                                                                                           TITLE
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Best Local :
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Michael Brownstein and Dr. Miklos Palkovits
cDNA Library Preparation: CLONTECH Laboratories, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
                                                                                                                                                                                                                                                                                                                                                                     CB958289 792 bp mRNA linear bagenCOURT 13778124 NTH MGC 184 Homo sapiens cDNA clone IMAGE:30352112 5', mRNA sequence.
                                                                                                                                                  Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

1 (Dases 1 to 792)

NIH-MGC http://mgc.nci.nih.gov/.

National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                               Contact: Robert Strausberg,
                                                                                                                                                                                                                                                                   Homo sapiens
                                                                                                                                                                                                                                                                                                                                         CB958289.1 GI:30214405
                                                                                                                                                                                                                                                                                                                                                              СВ958289
                                                                                                                                    Unpublished
                                                                                                                                                                                                                                                                                        Homo sapiens (human)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Similarity
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Library is oligo-dT primed and directionally cloned. cDNA
was prepared from a glandular pool of tissues from thyoid,
parathyroid, adrenal, cortex and pineal gland. 5' and 3'
adaptors were used in cloning as follows: 5' adaptor
sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence:
5'-ATTCTAGAGGCCGAGCGGCCAATGGGCGGT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size 1.38
kb (range 0.60-3.5 kb). 15/15 colonies contained inserts
by PCR. This library was enriched for full-length clones
and was constructed by Clontech Laboratories (Palo Alto,
CA). Note: this is a NIH MGC Library."

69 a 104 c 88 g 190 t
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/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="IMAGE:30329446"
/lab_host="DH10B (T1 phage-resistant)"
/clone lib="NIH MGC 184"
/note="Organ: Pooled-Glandular; Vector: pDNR-LIB; Site_1:
/mote="Crance: Site_2: Cfit (garager);
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RESULT 5
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                                                                      AUTHORS
TITLE
JOURNAL
                                                                                                                                                                                                        ORGANISM
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Contact: Robert Strausberg, Ph.D.
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Michael Brownstein and Dr. Miklos Palkovits
                                                                                      Eukaryota; Metazoa; Chordata; Craniata; V
Mammalia; Eutheria; Primates; Catarrhini;
1 (bases 1 to 793)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian
                                                                                                                                                                                                                                                                                                 AGENCOURT 13459298 NIH MGC 184 Homo IMAGE:30327061 5', mRNA sequence CB984475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
plate: NDCM150 row: 1 column: 09
                                                                        Unpublished
                                                                                                                                                                                                        Homo sapiens
                                                                                                                                                                                                                                                                            CB984475.1
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                                                                                                                                                                                                                             Homo sapiens (human)
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/db_xref="mtxxxx: 9052112"
/lab_host="DH10B (T1 phage-resistant)"
/clone | lib="MIH MGC 184"
/clone | lib="MIH MGC 184"
/clone | lib="MIH MGC 184"
/note="Organ: Pooled-Glandular; Vector: pDNR-LIB; Site_1: SfiI (ggcgctteggcc);
Library is oligo-dT primed and directionally cloned. cDNA was prepared from a glandular pool of tissues from thyoid, parathyroic, adrenal, cortex and pineal gland. 5' and 3' adaptors were used in cloning as follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence: 5'-ATTCTAGAGGCCGAGCGGCCATTATGGCC-3' and 3' adaptor sequence: 5'-OT and M = A, C, G, or T). Average insert size 1.38 kb (range 0.60-3.5 kb). 15/15 colonies contained inserts by PCR. This library was enriched for full-length clones and was constructed by Clontech Laboratories (Palo Alto, CA). Note: this is a NIH MGC Library."

235 t 1 others
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mol_type="mRNA"
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                                                                                                                                                                                                                                                                            GI:30278999
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                                                                                                                                                            Craniata; Vertebrata; Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94;
                                                                                             Gene Collection
                                                                                                                                                                 Hominidae;
                                                                                                                                                                                                                                                                                                                                         linear EST 01-MAY-2003
s cDNA clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                      Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9
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ACCESSION
VERSION
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CB985521
                                                                              REFERENCE
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ORIGIN
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                                                                                                                                                                                                               KEYWORDS
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                            AUTHORS
TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 13.0%;
Best Local Similarity 60.2%;
  JOURNAL
                                                                                                                                                             ORGANISM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 151;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41
Unpublished
                Mammalia; Eutheria, Primates; Catarrhini; Hominidae; Homo.
1 (Dases 1 to 831)
NIH-MGC http://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
                                                                                                                                                                                                                                                                  CB985521
                                                                                                                                                                                                                                                                                        CB985521 831 bp rAGENCOURT 13652179 NIH MGC_184 Homo RAGE:30327553 5', mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov Plate: NDCM135 row: h column: 14
                                                                                                                                                               Homo
                                                                                                                                                                                                                                           CB985521.1 GI:30280045
                                                                                                                                 Eukaryota; Metazoa;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAGAGAGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGACTATGGATCAAATTÁTCTÁTATGACAATTGATATCCTTAGTÁATCÁTGGGGCÁTGÁT 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAATTATCCTCCTGCGTATCCATTTCCTTAAAATGCTGCTTAGTAACTACAGGACATGAT 359
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTTGGCTCTCATGATTTCCATGATTAGCGCTGATTCACATGAAAAGAGACATCATGGGTA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAATTTCATCTTTCATGACTGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCAT 179
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                                                                                                                                                                                      sapiens (human
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Location/Qualifiers
                                                                                                                                                          sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /clone="IMAGE:30327061"
/lab host="DHH10B (T1 phage-resistant)"
/clone lib="NHH MGC 184"
/note="Organ: Pooled-Glandular; Vector: pDNR-LIB; Site_1:
SfiI (ggccattatggcc); Site_2: SfiI (ggcgcctggcc);
Library is oligo-dT primed and directionally cloned.cDNA
was prepared from a glandular pool of tissues from thyoid,
parathyroid, adrenal, cortex and pineal gland. 5' and 3'
adaptors were used in cloning as follows: 5' adaptor
sequence: 5'-CACGGCCATMATGGCC-3' and 3' adaptor sequence:
5'-ATTCTAGAGGCCGAGCGGGCGACATG-dT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size 1.38
kb (range 0.60-3.5 kb). 15/15 colonies contained inserts
by PCR. This library was enriched for full-length clones
and was constructed by Clontech Laboratories (Palo Alto,
CA). Note: this is a NIH MGC Library."

30 a 168 c 152 g 242 t 1 others
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db_xref="taxon:9606"
                                                                                                  Chordata; Craniata; Vertebrata; Euteleostomi; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0; Mismatches
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Pred. No. 0.074;
                                                                                                                                                                                                                                                                                                                                                mRNA
                                                                                                                                                                                                                                                                                                                       sapiens
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cDNA clone
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RESULT 7
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Best Local Similarity
                                                                           ORGANISM
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Tissue Procurement: Dr. Michael Brownstein and Dr. Miklos Palkovits
cDNA Library Preparation: CLONTECH Laboratories, Inc.
cDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can be
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. 1 (bases 1 to 929)
                                                                     Homo sapiens
                                                                                                                         CB987745
CB987745.1 GI:30282265
EST.
                                                                                                                                                                                               CB987745 929 bp mRNA linear ES' AGENCOURT 13631497 NIH MGC 184 Homo sapiens cDNA clone IMAGE:30327757 5', mRNA sequence.
                                                                                               Homo sapiens (human)
                                                                                                                                                                                                                                                CB987745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    found through the I.M.A.G.E. Consortium/LLNL at: http://image.llnl.gov
Plate: NDCM136 row: m column: 02
High quality sequence stop: 177.
Location/Qualifiers
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Sfil (ggcattatggcc); Site_2: Sfil (ggcgctcggcc);
Library is oligo-dT primed and directionally cloned. cDNA
was prepared from a glandular pool of tissues from thyoid,
parathyroid, adrenal, cortex and pineal gland. 5' and 3'
adaptors were used in cloning as follows: 5' adaptor
sequence: 5'-CACGGCCATTATGGCC-3' and 3' adaptor sequence:
5'-ATTCTACAGGCCGAGCGGCCACATG-dT(30)BN-3' (where B = A,
C' or G and N = A, C' G, or T). Average insert size 1.38
kb (range 0.60-3.5 kb). 15/15 colonies contained inserts
by PCR. This library was enriched for full-length clones
and was constructed by Clontech Laboratories (Palo Alto,
CA). Note: this is a NIH MGC Library."

05 a 241 c 112 g · 273 t
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/lab_host="DH10B (T1 phage-resistant)"
/clone_lib="NIH_MGC_184"
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/mol_type="mRNA"
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Pred. No. 0.
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RESULT 8
HSM076012
ID HSM07
XX
AC BX485
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SX BX485
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TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
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 09-MAY-2003
09-MAY-2003
                                                         BX485825.1
                                                                                                                               HSM076012
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Tissue Procurement: Dr. Michael Brownstein and Dr. M:
CDNA Library Preparation: CLONTECH Laboratories, Inc
CDNA Library Arrayed by: The I.M.A.G.E. Consortium
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution informat:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Contact: Robert Strausberg, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TATGGCTCTCATCCTAGCCATGATTAGAGCTGATTCATCTGAAGAGAAACGTCACAGGAA
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                                                                                                                                                                                                                                                                                                                                                                     TAGAAGAAAATTCCAT-----GAAAAGCATCATTCACATCGAGAATTTCCATTTTATGG
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                                                                                                                               standard; RNA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       e: NDCM137 row: e column: 14 quality sequence stop: 386. Location/Qualifiers
 (Rel.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sfil (ggccattatggcc); Site_2: Sfil (ggccgcttcggc);
Library is oligo-dT primed and directionally cloned. cDNA
was prepared from a glandular pool of tissues from thyoid,
parathyroid, adrenal, cortex and pineal gland. 5' and 3'
adaptors were used in cloning as follows: 5' adaptor
sequence: 5'-CACGGCCATRATGGCC-3' and 3' adaptor sequence:
5'-ATTCTAGAGGCCGACGGCCGACTATG-dT(30)BN-3' (where B = A,
C, or G and N = A, C, G, or T). Average insert size 1.38
kb (range 0.60-3.5 kb). 15/15 colonies contained inserts
by PCR. This library was enriched for full-length clones
and was constructed by Clontech Laboratories (Palo Alto,
CA). Note: this is a NIH_MGC Library."

69 a 199 c 185 g 274 t 2 others
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /lab_host="DH108 (T1 phage-resistant)"
/clone_lib="NIH_MGC_184"
/note="Organ: Pooled-Glandular; Vector: pDNR-LIB; Site_1:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"
/mol_type="mRNA"
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No. 0.
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standard; RNA; EST;

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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Clone from S. Wiemann, Molecular Genome Analysis, German Cance: Research Center (DKF2); Email s.wiemann@dkf2-heidelberg.de; sequenced by MediGenomix (Martinsried/Germany) within the cDNA sequencing consortium of the German Genome Project.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Submitted (07-MAY-2003) to the EMBL/GenBank/DDBJ databases MIPS, Ingolstaedter Landstr.1, D-85764 Neuherberg, GERMANY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Eutheria; Primates; Catarrhini; Hominidae; Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   source
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Please contact the RZPD: Ressourcenzentrum, Heubnerweg 6,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            This is
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Amid C.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ottenwaelder B.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Homo sapiens (human)
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                                                                                                                                                        GGACTATGGATCAAATTATCTATATGACAATTGATATCCTTAGTAATCATGGGGCATGAT
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                                                                          TATAGAG--GTAAGCTGACTCTAGTTGCTTGTCTTTCTAGAAGTGTCAACACTGACAGTT
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/clone_lib="686 (synonym: h
DH10B; sites SfiIA + SfiIB"
/dev_stage="adult"
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'organism="Homo sapiens"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             212 T; 1 other;
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09-MAY-2003
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                                                                  TAGAGAGATTTTTCACAATGATTTTTCCTACTCTTTCTGTTGTTGTAAAAACCATCTTTC 419
                                                                                                        GGACTATGGATCAAATTATCTATATGACAATTGATATCCTTAGTAATCATGGGGCATGAT
                                                                                                                                                                          TAGAAGAAAATTCCAT-----GAAAAGCATCATTCACATCGAGAATTTCCATTTATGG
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AAATGAATAAAACAAAGAAAAAAAAAATCAGTCAAGT 455
                                 TATAGAG--GTAAGCTGACTCTAGTTACTTGTCTTTCTAGAAGTGTCAACACTGACAGTT
                                                                                                                                                                                                                                                CTTGGCTCTCATGATTTCCATGATTAGCGCTGATTCACATGAAAAGAGACATCATGGGTA
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DH10B; sites SfiIA + SfiIB"
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/mol_type="mRNA"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 dev_stage="adult"
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                                                                                                                                                                                                                                                                                                                                                                                                                           DB 2;
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AGENCOURT 13650773 NIH
IMAGE:30329891 5', mRNJ
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Location/Qualifiers
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National Institutes of Health, Mammalian Gene Collection
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Email: cgapbs-r@mail.nih.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Contact: Robert Strausberg,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo
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AAATTATCCTCCTGCGTATCCATTTCCTTAAAATGCTGCTTAGTAACTACAGGACATGAT
                                                                                                                                                                                                                                                                               TATGGCTCTCATCCTAGCCATGATTAGAGCTGATTCATCTGAAGAGAGAAACGTCACAGGAA
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                                                                                  Matches 150;
                                                                                                            Best Local Similarity
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120 GAATITCATCTTTCATGACTGGACTCCACCAAATATGAAGATCTTTATCTTTGTCTTCAT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: arkerlav@tigr.org
For clone availability, additional sequence and expression
information related to this EST, please check the TIGR Human Gene
Index (http://www.tigr.org/tdb/hgi/hgi.html)
Seq primer: M13 Reverse.
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Adams, M.D., Kerlavage, A.R.,
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Institute for Genomic Research
2 Medical Center Drive, Rockville, MD 20850 USA
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                                                                                  Conservative
                                                                                                                                                                                                                 Site_1:
                                                                                                                                                                                                                                                                                                                                 /organisme"Homo sapiens"
/mol_type="mRNA"
/db xref="ATCC (inhost):181117"
/db_xref="taxon:9606"
                                                                                                                                                                                                         /clone lib="Salivary gland",
/note="Organ: salivary gland; Vector: pBluescript SK-;
Site_1: EcoRI; Site_2: kho!"
59 c 52 g 108 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ocation/Qualifiers
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                                                                                                    12.7%;
                                                                                                                                                                                                                                                                                                                 stage="adult"
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Pred. No. (
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13 Adams, M.D., Kerlavage, A.R., Fleischmann, R.D., Fuldner, R.A., Bult (C.J., Lee, N.H., Kirkness, E.F., weinstock, K.G., Gocayne, J.D., White, O., Sutton, G., Blake, J.A., Brandon, R.C., Man.Wai, C., Clayton, R.A., Cline, T.R., Cotton, M.D., Earle-Hughes, J., Fine, L.D., Fitzgerald, L.M., Fitzhugh, W.M., Fritchman, J.L., Geoghagen, N.S., Glodek, A., Gnehm, C.L., Hanna, M.C., Hedblom, E., Hinkle, P.S., Jr., Kelley, J.M., Kelley, J.C., Liu, L.-I., Marmaros, S.M., Merrick, J.M., Kelley, J.M., Kelley, J.C., Liu, L.-I., Marmaros, S.M., Merrick, J.M., Shirley, R., Moreno-Palanques, R.F., McDonald, L.A., Nguyen, D.T., Pelligrino, S.M., Phillipp, C.A., Ryder, S.E., Scott, J.L., Saudek, D.M., Shirley, R., Small, K.V., Spriggs, T.A., Utterback, T.R., Weidman, J.F., Li, Y., Bednarik, D.P., Cao, L., Cepeda, M.A., Coleman, T.A., Collins, E.J., Dimke, D., Feng, D.-F., Ferrie, A., Fischer, C., Hastings, G.A., He, W.M., Hu, J.S., Greene, J.M., Gruber, J., Hudson, P., Kim, A.K., Kozak, D.L., Kunsch, C., Hungjun, J., Li, H., Meissner, P.S., Olsen, H., Raymond, L., Weit, F., Weit, R., Rosen, C.A., Haseltine, W.A., Fields, C., Fraser, C.M. and
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96026280
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Contact: Kerlavage, A
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Nature 377
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                                                                                                                                                                            For clone availability, additional sequence and expression information related to this EST, please check the TIGR Human Gene Index (http://www.tigr.org/tdb/hgi/hgi.html)
Seq primer: M13 Reverse.
                                                                                                                                                                                                                                                                                                           Tel: 3018699056
Fax: 3018699423
                                                                                                                                                                                                                                                                                                                                                        The Institute for Genomic 9712 Medical Center Drive,
                                                                                                                                                                                                                                                                                                                                                                                                                Bioinformatics
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                                                                                                                                                                                                                                                                              Email: arkerlav@tigr.org
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Venter, J.C.
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                       /organism="Homo sapiens"
/mol_type="mRNA"
/db xref="ATCC (inhost):186803"
/db_xref="taxon:9606"
                                                                                                                                                    ocation/Qualifiers
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Homo sapiens cDNA 5' end similar to histatin
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Relation, Entirects, College, Political Politics, Dollege, Box Adams, M.D., Kerlavage, A.R., Fleischmann, R.D., Fuldner, R.A., Bult (C.J., Lee, N.H., Kirkness, E.F., Weinstock, K.G., Gocayne, J.D., White, O., Sutton, G., Blake, J.A., Brandon, R.C., Man-Wai, C., Clayton, R.A., Cline, T.R., Cotton, M.D., Earle-Hughes, J., Fine, L.D., Fitzgerald, L.M., Fitzhugh, W.M., Fritchman, J.L., Geoghagen, N.S., Glodek, A., Gnehm, C.L., Hanna, M.C., Hedblom, E., Hinkle, P.S. Jr., Kelley, J.M., Moreno-Balanques, R.F., McDonald, L.A., Nguyen, D.T., Felligrino, S.M., Phillips, C.A., Ryder, S.E., Scott, J.L., Saudek, D.M., Shirley, R., Small, K.V., Spriggs, T.A., Utterback, T.R., Weidman, J.F., Li, Y., Bednarik, D.F., Cao, L., Cepeda, M.A., Coleman, T.A., Collins, E.J., Linke, D., Feng, D.-F., Ferrie, A., Fischer, C., Hastings, G.A., He, W.W., Hu, J.S., Greene, J.M., Gruber, J., Hudson, P., Kim, A.K., Kozak, D.L., Kunsch, C., Hungjun, J., Li, H., Meissner, P.S., Olsen, H., Raymond, L., Weiter, J.C., Rosen, C.A., Haseltine, W.A., Fields, C., Fraser, C.M. and Venter, J.C.
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EST89161
                                                                                                                                          Initial assessment of human gene diversity and expression patterns based upon 83 million nucleotides of cDNA sequence Nature 377 (6547 Suppl), 3-174 (1995)
                                                                  Contact: Kerlavage,
                                                                                           Other_ESTs: EST89160
                                               Bioinformatics
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Institute for Genomic Research
2 Medical Center Drive, Rockvil
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/clone_lib="Testis I"
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59.8%;
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Pred. No. 0.18;
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  Rockville,
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SOURCE
ORGANISM
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Best Local :
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Mammalia; Butheria; Primates; Craniata; Vertebrata; Buteleostomi; Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.

CE 1 (bases 1 to 348)

CE 1, Lee, N. H., Kirkness, E. F., Weinstock, K. G., Gocayne, J. D., White, C. J., Lee, N. H., Kirkness, E. F., Weinstock, K. G., Gocayne, J. D., White, C. J., Lee, N. H., Kirkness, E. F., Weinstock, K. G., Gocayne, J. D., White, C. J., Etchwan, J. L., Geoghagen, N. S., Glodek, A., Cline, T. R., Cotton, M. D., Earle-Hughes, J., Fine, L. D., Fitzperald, J. M., Fitzhugh, W. M., Fritchman, J. L., Geoghagen, N. S., Glodek, A., Grehm, C. L., Hanna, M. C., Hedblom, E., Hinkle, P. S. Jr., Kelley, J. M., Kelley, J. G., Liu, L. -I., Marmaros, S. M., Merrick, J. M., Kelley, J. C., Liu, L. -I., Marmaros, S. M., Merrick, J. M., Shirley, R., Fhillips, C. A., Ryder, S. E., Scott, J. L., Saudek, D. M., Shirley, R., Smill, K. V., Spriggs, T. A., Utterback, T. R., Weidman, J. F., Li, Y., Bednarik, D. P., Cao, L., Cepeda, M. A., Coleman, T. A., Collins, E. J., Hu, J. S., Greene, J. M., Gruber, J., Hudson, P., Kim, A. K., Kozak, D. L., Kunsch, C., Hungjun, J., Li, H., Meissner, P. S., Olsen, H., Raymond, L., Wei, Y. F., Wing, J., Xu, C., Yu, G. L., Ruben, S. M., Dillion, P. J., Fannon, M. R., Rosen, C. A., Haseltine, W. A., Fields, C., Fraser, C. M. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
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EST89145
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For clone availability, additional sequence and expression
information related to this EST, please check the TIGR Human Gene
Index (http://www.tigr.org/tdb/hgi/hgi.html)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Homo sapiens
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AA376689.1 GI:2029007
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /clone_lib="Salivary gland"
/note="Organ: salivary gland; Vector: pBluescript
Site_1: EcoRI; Site_2: XhoI"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /mol_type="mRNA"
/db_xref="ATCC (inhost)
/db_xref="taxon:9606"
/dev_stage="adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       348 bp mRNA linear EST 21-3 Salivary gland Homo mapiens cDNA 5' end millar to
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Venter,J.C.

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RESULT 15
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                                                                                                                                                                  KEYWORDS
                                                                                                                                                                                     VERSION
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MEDLINE
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Best Local Similarity
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                   TITLE
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JOURNAL
                                                       AUTHORS
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                                                                                                                                                                                                                     EX283872 NIH MGC 81 Homo sapi
IMAGE:4289874, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       For clone availability, additional sequence and expression information related to this EST, please check the TIGR Human Gene Index (http://www.tigr.org/tdb/hgi/hgi.html) Seq primer: M13 Reverse.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Other_ESTs: EST89144 THC102726
Contact: Kerlavage, AR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Initial assessment of human gene diversity and expression patterns based upon 83 million nucleotides of cDNA sequence based 377 (6547 Suppl), 3-174 (1995)
                                                                                                                                                                                                         IMAGE: 4289874,
BX283872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tel: 3018699056
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The Institute for Genomic Research
9712 Medical Center Drive, Rockville, MD 20850 USA
               Radelof, U., Schneider, D. and Korn, B. Human UnigeneSet - RZPD3
                                                     1 (bases 1 to 390)
Ebert,L., Heil,O.,
                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae
                                                                                                                                Homo sapiens
                                                                                                                                                                     EST
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Email: arkerlav@tigr.org
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAATTTCATCTTTCATGACTGGACTCCACCAAATATGAAGATCTTTATCTTTTGTCTTCAT 179
                                                                                                                                                                                                                                                                                                                                                                                                                                    GGACTATGGATCAAATTATCTATATGACAATTGATATCCTTAGTAATCATGGGGCATGAT
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                                                                                                                                                  sapiens (human)
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/note="Organ: salivary gland; Vector: pBluescript SK-;
Site_1: EcoRI; Site_2: XhoI"
a __66 c __60 g __119 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /organism="Homo sapiens"

/mol type="mRNA"

/db_xref="ATCC (inhost):181112"

/db_xref="taxon:9606"

/dev_stage="adult"
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                                                   Hennig, S.,
                                                                                                                                                                                                                                           390 bp mRNA linear EST 05-MAR-2003 Homo sapiens cDNA clone IMAGp958N191131;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 77; DB 9;
Pred. No. 0.17;
                                                   Neubert, P., Partsch, E., Peters, M.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               95;
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                                                                                          Hominidae;
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Best Local Similarity 59.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         http://www.rzpd.de/CloneCards/ggi-
bin/showLib.pl.cgi/response?libNo=972 Contact: Ina Rolfs
RZPD Deutsches Ressourcenzentrum fuer Genomforschung Gmb/
Heubnerweg 6, D-14059 Berlin, Germany
Tel: +49 30 32639 101
Fax: +49 30 32639 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RZPD Deutsches Ressourcenzentrum fuer Genomforschung
Im Neuenheimer Feld 580, D-69120 Heidelberg, Germany
RZPD; IMAGP958N191131.
RZPDLIB; I.M.A.G.E. cDNA Clone Collection;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  This clone is available royalty-free from RZPD; contact RZPD (clone@rzpd.de) for further information. Seq pCMV-M13u, Primer sequence: CGTTGTAAAACGACGGCCAGT.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Contact: Ina Rolfs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       www.rzpd.de
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RZPDLIB; I.M.A.G.E. cDNA Clone Collection Human UnigeneSet - RZPD3 (RZPDLIB No.972)
                                 TAGAGAGATTT 370
                                                                                                                                                                                                                                                                                                                                  TATGGCTCTCATCCTAGCCATGATTAGAGCTGATTCATCTGAAGAGAGAAACGTCACAGGAA
                                                                                                 GGACTATGGATCAAATTATCTATATGACAATTGATATCCTTAGTAATCATGGGGCATGAT
                                                                                                                                           AAATTATCCTCCTGCGTATCCATTTCCTTAAAATGCTGCTTAGTAACTACAGGACATGAT 359
                                                                                                                                                                                                 TAGAAGAAATTCCAT-----GAAAAGCATCATTCACATCGAGAATTTCCATTTTATGG
                                                                                                                                                                                                                                               ACGGAAAAAACATCATAGAGGATATTTTCAACAATACCAGCCATATCAACGATATCCACT
                                                                                                                                                                                                                                                                                                   CTTGGCTCTCATGATTTCCATGATTAGCGCTGATTCACATGAAAAGAGACATCATGGGTA
                                                                                                                                                                                                                                                                                                                                                                                                  GACTCTCCTCTTGAGTAAAAGGACTCAGCCAACTATGAAGTTTTTTTGTCTTTGCTTTAGT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          clones and was constructed by Clontech
Alto, CA)."
3 75 c 66 g 129 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C, or G and N = A, C, G, or T). Average insert size C, or G and N = A, C, G, or T). Average insert size 1.55 kb (range 1.0-4.0 kb). 15/15 colonies contained inserts by PCR. This library was enriched for full-length inserts by PCR. This library was enriched for full-length contains a constructed by Clontech Laboratories (Palo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Homo sapiens"
/mol_type="mRNA"
/db_xref="taxon:9606"
/clone="InAcp958N191131 ; IMAGE:4289874"
/lab_host="DH10B (T1 phage-resistant)"
/clone_lib="NHH_MCC_81"
/note="Organ: muscle (skeletal); Vector: pDNR-LIB
/note="Organ: muscle (skeletal); Vector: pDNR-LIB
(Clontech); Site_1: Sfi1 (ggccgctcggcc); Site_2: Sfi1
(ggccattatggcc); 5' and 3' adaptors were used in cloning
as follows: 5' adaptor sequence: 5'-CACGGCCATTATGGCC-3'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   and 3' adaptor sequence:
5'-ATTCTAGAGGCCGAGGCGGCCGACATG-dT(30)BN-3' (where B = A,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 77; DB 1:
Pred. No. 0.16;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      95;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 390,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GmbH
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